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ABSTRACT

The primary objective of Project SUCCESS was to provide each student with the opportunity to match his abilities, interests, and values with the requirements for current and future job opportunities. In an effort to determine the effectiveness of the project, this document presents a summary of the related evaluation data. The majority of the document is devoted to the appendixes, including enrollment trends for the various program areas plus objective ratings. The overall effectiveness of the program is 2.93 based on a 4.0 scale, indicating that the program needs further development, but is generally adequate. (CD)

FINAL REPORT

Project No. 603046
Grant No. OEG-4-7-063046-1612



# PROJECT S.U.C.C.E.S.S.

## STUDENT UPWARD CHALLENGES IN COMPREHENSIVE EXEMPLARY SECONDARY SCHOOLS

School Year 1969-70

October 1970

U.S. Department of
Health, Education, and Welfare

Office of Education
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# PROJECT S.U.C.C.E.S.S.

## STUDENT UPWARD CHALLENGES IN COMPREHENSIVE EXEMPLARY SECONDARY SCHOOLS

School Year 1969-70

Principal Investigator: Richard Keene
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The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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## INTRODUCTION

The goal of Project SUCCESS was to provide each student with the opportunity to match his abilities, interests, and values with the requirements for current and future job opportunities, thus maximizing the returns on his vocational educational investment.

During the summer of 1969 and continuing into the school year, sets of instructional objectives were prepared by the staff and coordinators of each school program. These objectives were the basis for a composite list of objectives prepared by the Research and Innovation Division of the Office of the State Superintendent of Public Instruction.

The composite lists were then critically reviewed by the State education specialists to ensure their relevance to job entry requirements. They were then revised and edited by the Research Coordinating Unit with the assistance of the project directors and school staffs, cast in the form of a rating checklist (See Appendix A), and copies distributed in April to the project coordinator of each school and appropriate curriculum specialists. The returned rating forms provided the data for preparation of individual school evaluations.

## LIMITATIONS

1. The objectives on which the report was based were not adequate to the task. They were of unequal importance, often represented only part of the course objectives, and were frequently ambiguous.

2. The ratings reflected at least three variables: whether the objective had been met; whether the objective was important; and whether additional support was needed to meet the objective. Thus, while the ratings were interpreted by the R & I evaluator as indicating how much more time, attention, or resources would be required to meet the objective (or how well the objective was being met), it was reported by the project coordinator that this was not always the meaning intended by the individual who answered the checklist.

3. The basis of the enrollment trend analyses consisted of "duplicated counts," that were not reported uniformly by all three schools. Unambiguous interpretation of enrollment data was impossible.

## METHOD

The data for this report were provided by the individual school evaluations and student enrollment summaries provided by each project coordinator. (See Appendix B.)

Mean achievement scores for all three schools were computed for General Administrative functions, Guidance/Placement activities, Specific Vocational instruction, and Supportive Interdisciplinary programs. The mean of these four ratings was regarded as a general assessment of the program as seen by education specialists and school staff members.

Enrollment reports were examined to find trends over time.

## ENROLLMENT TRENDS

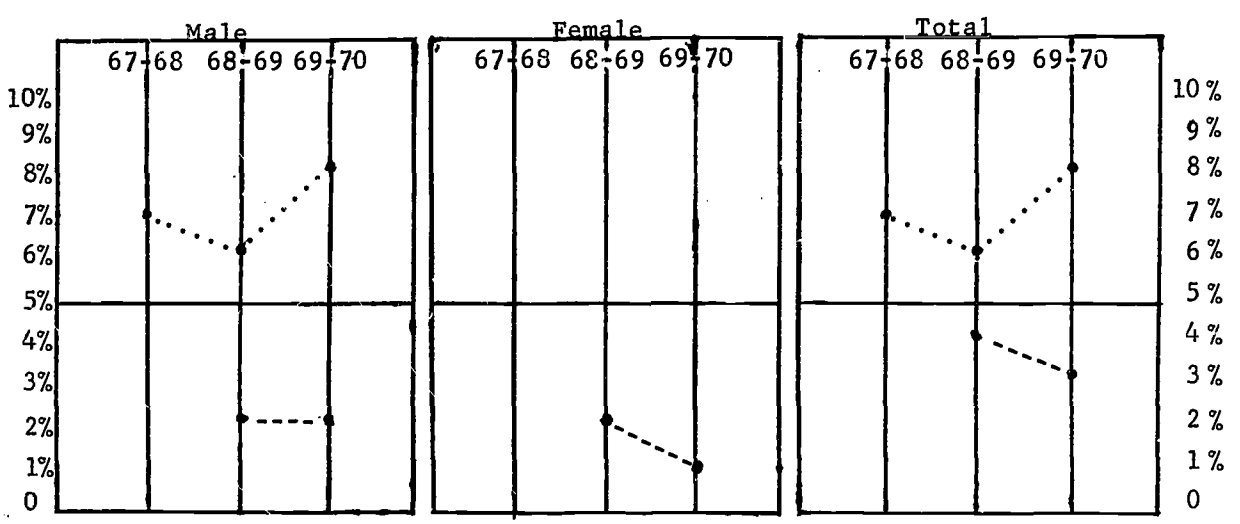
At the end of the school year, each participating school submitted program enrollment reports. These reports were examined to find evident trends in enrollment data. The tallies reported for the various programs were duplicated counts; if a student took classes in more than one program he could be counted more than once.

Data was presented for the years 1967-68, 1968-69, 1969-70. For each high school the percentage of students in each vocational program was computed and is reported in Appendicies C, D, and E. These percentages were then plotted graphically and examined for trends.

### Vocational Agriculture

Only Kearns and Clearfield High Schools have Vocational Agriculture programs. From three to eight percent of the students in each school were enrolled, and there are no obvious trends over time. Clearfield's Vocational Agriculture students are exclusively male, while Kearns are about half female.

Figure I



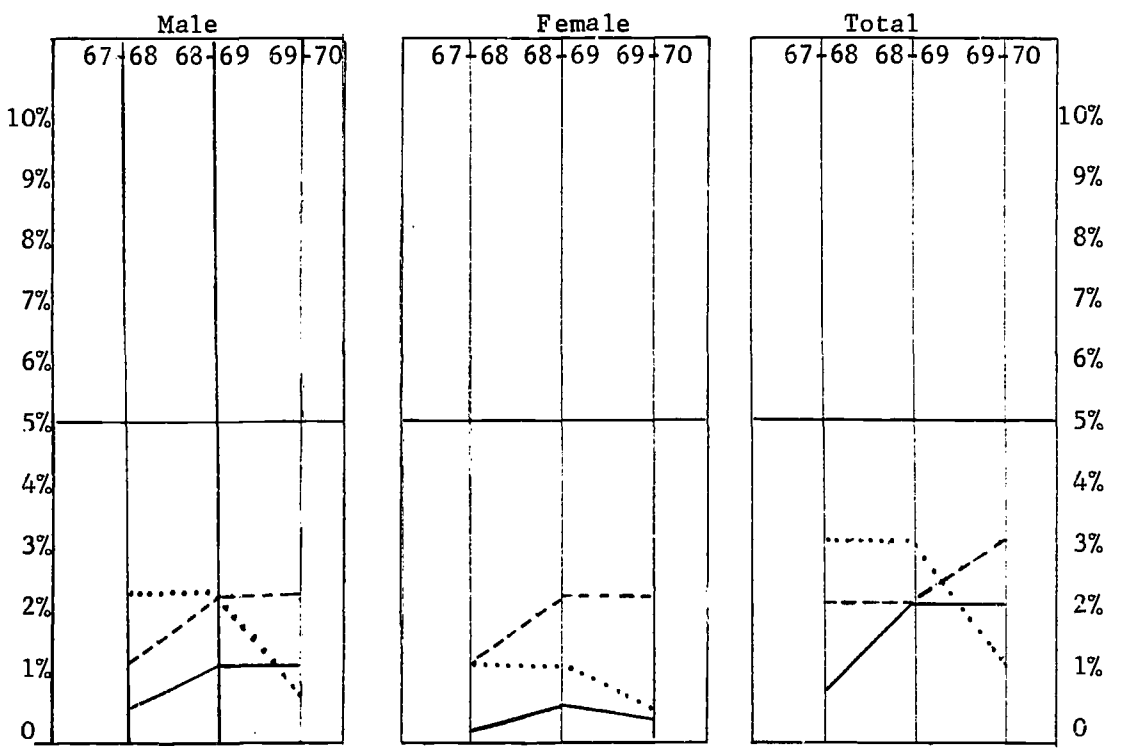

Agriculture

Kearns High School - - - -
Clearfield High School . . . .

Distributive Vocations

All three schools have small Distributive Education programs. They represent from 0.2 to 3 percent of the student populations and show little change over time.

Figure II



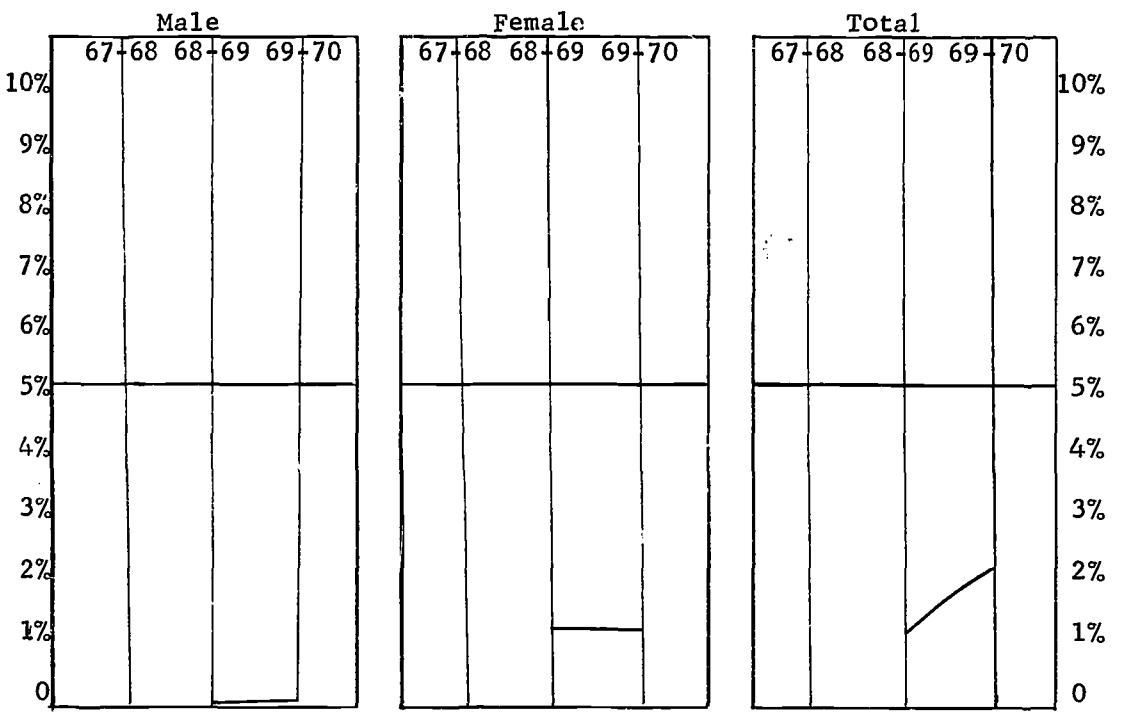

Kearns High School ----------
Clearfield High School .....
East High School _____

Distributive

Health Service Occupations

Only East High School has a vocational program in Health Service Occupations From one to two percent of the students enroll in these courses. and there are no evident trends in enrollment.

Figure III

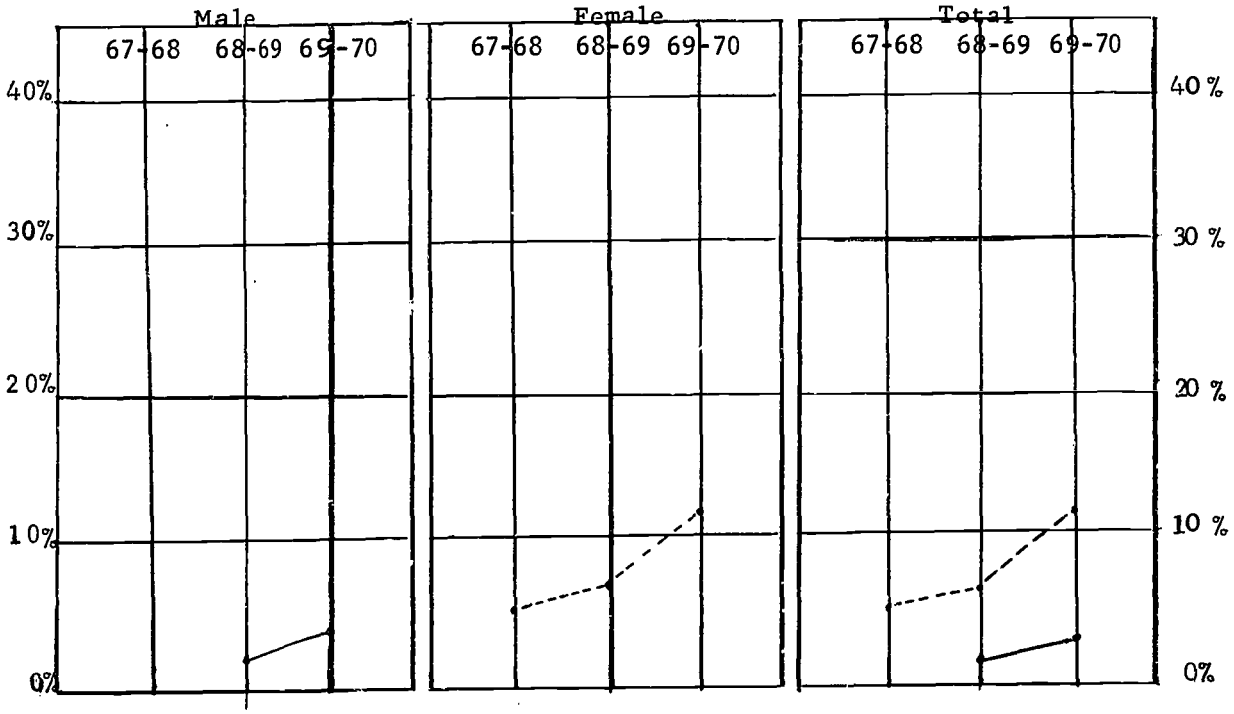



East High School _____ Health Occupations

Gainful Home Economics Vocations

Only East and Kearns High Schools have programs in Gainful Home Economics. Students in these programs are all male at East and all female at Kearns. There is a slight trend toward increasing enrollment at both schools: from five to twelve percent at Kearns, and from three to four percent at East. Only 14% of Gainful Home Economics students at Kearns complete the course compared to 100% at East.

Figure IV

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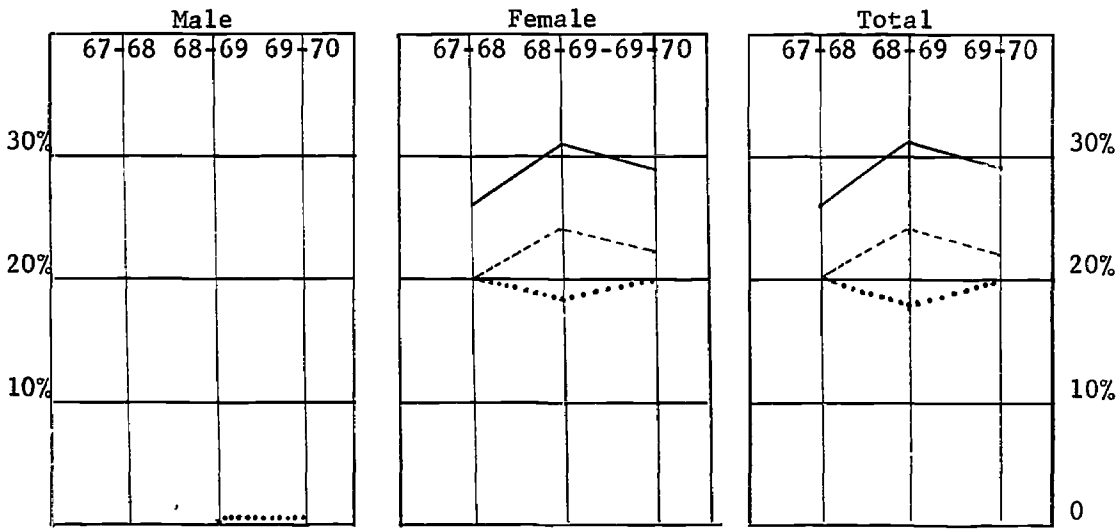
Home Economics - Gainful

Kearns High School ------
Clearfield High School .....
East High School _____

Useful Home Economics Occupations

Almost all students enrolled in Useful Home Economics courses are female. From 18 to 32 percent of the students in each high school enroll in these courses. Enrollment was relatively stable over the three year period; though enrollment at East High School showed a distinct increase in 1968-69.

Figure V




East High School _____

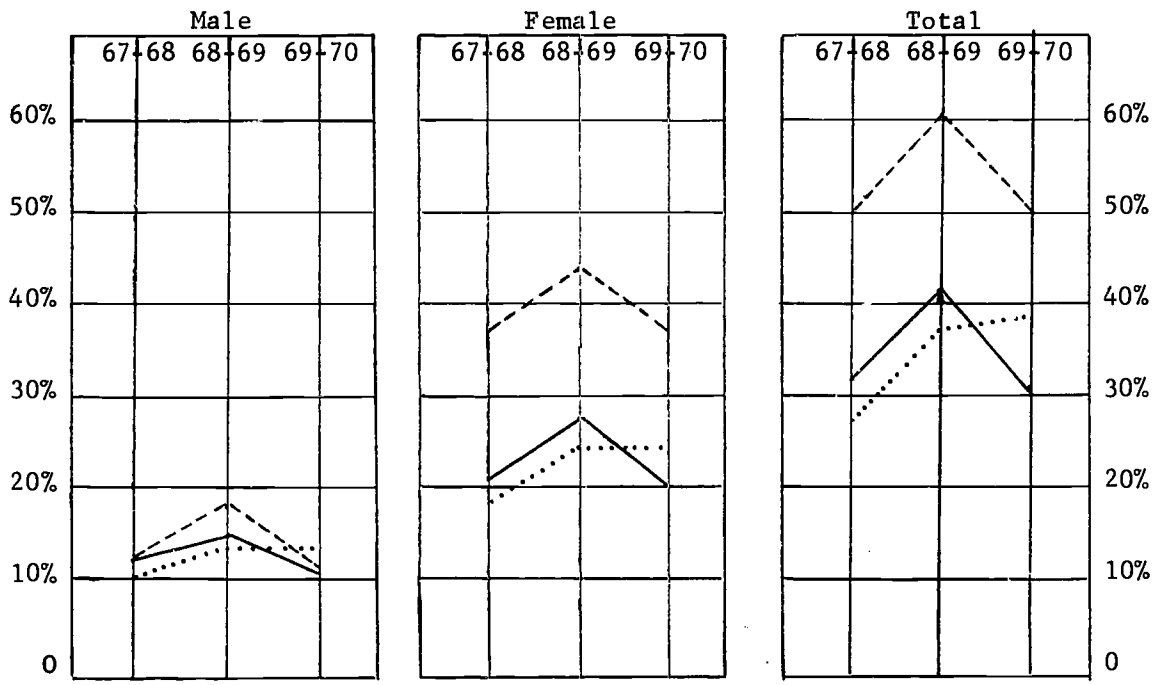
Clearfield School .....

Kearns High School ----------

Office Occupations

All three schools have office occupations programs. Most of the students are girls, about 1/5 to 1/3 being male. The proportion of Office students at Clearfield has risen from 28%, to 37%, to 38% in the past three years. The other two schools showed a sharp increase in the proportion of office occupations sutdents in 1968-69 and a sharp decrease the next year.

Figure VI




Office Occupations

East High School _____
Kearns High School - - - - - - - - - - - - - - - - - -
Clearfield .....

Trade and Industrial Vocations

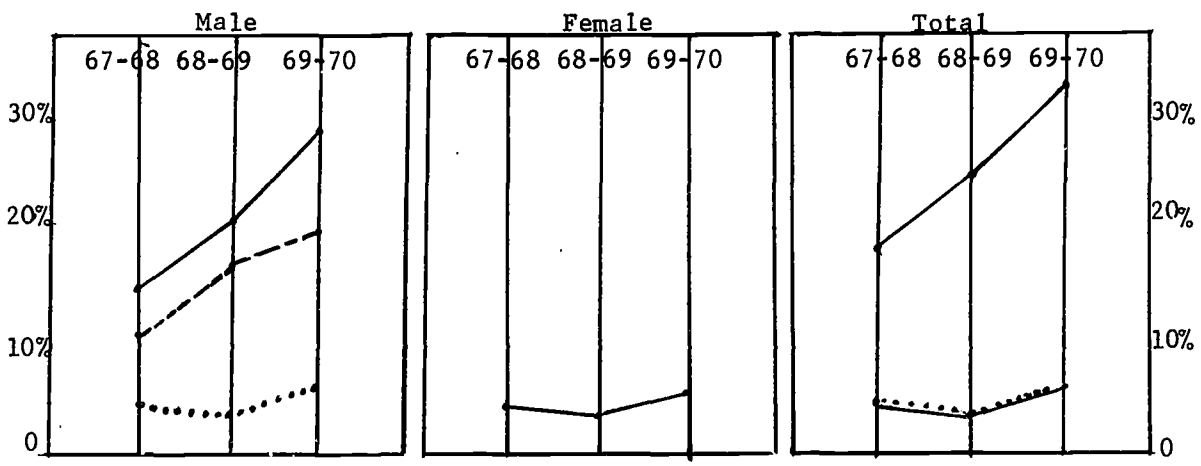
All three schools have Trade and Industrial Programs. About 1/5 to 1/3 of East's T & I students are girls, and the ratio of girls to boys is falling. Other schools report only boys in T & I programs.

At Clearfield High School the ratio of students enrolled in these programs has been relatively stable, and varies from 4 to 6 percent.

The ratio of Kearns students in the program has been rising steadily, from a low of 11% in 1967-68, to a high of 18% in 1969-70.

The increase in T & I enrollment at East High School is striking, from 18%, to 25%, to 34%, during the past three years.

Figure VII



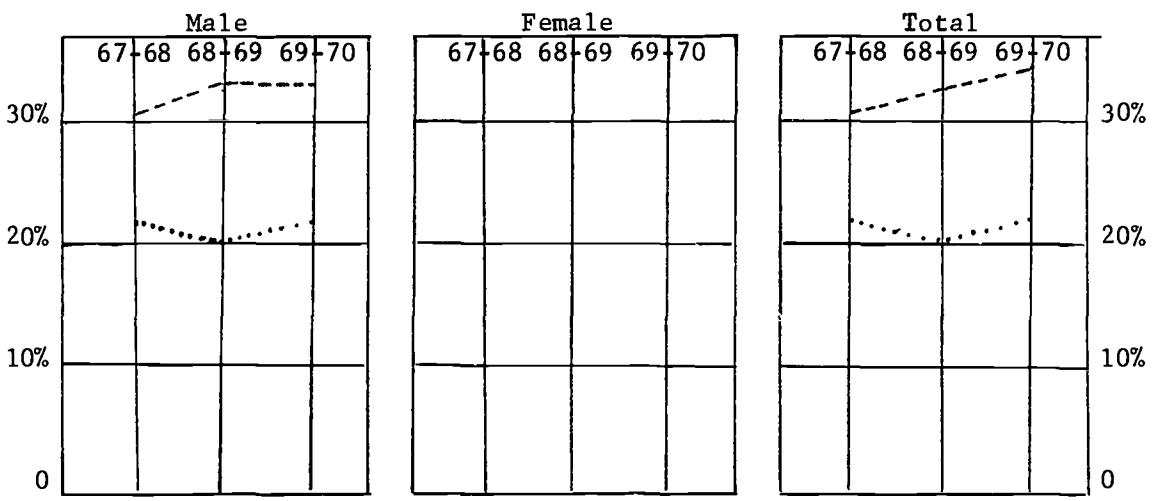

Trades and Industrial

East _____
Kearns -----
Clearfield .....

Indurstial Arts

Most Industrial Arts students are boys, except for a small group of girls (less than 1%) at Kearns. Enrollment is relatively stable, ranging from 20 to 22 % at Clearfield and from 32 to 36% at Kearns.

Figure VIII



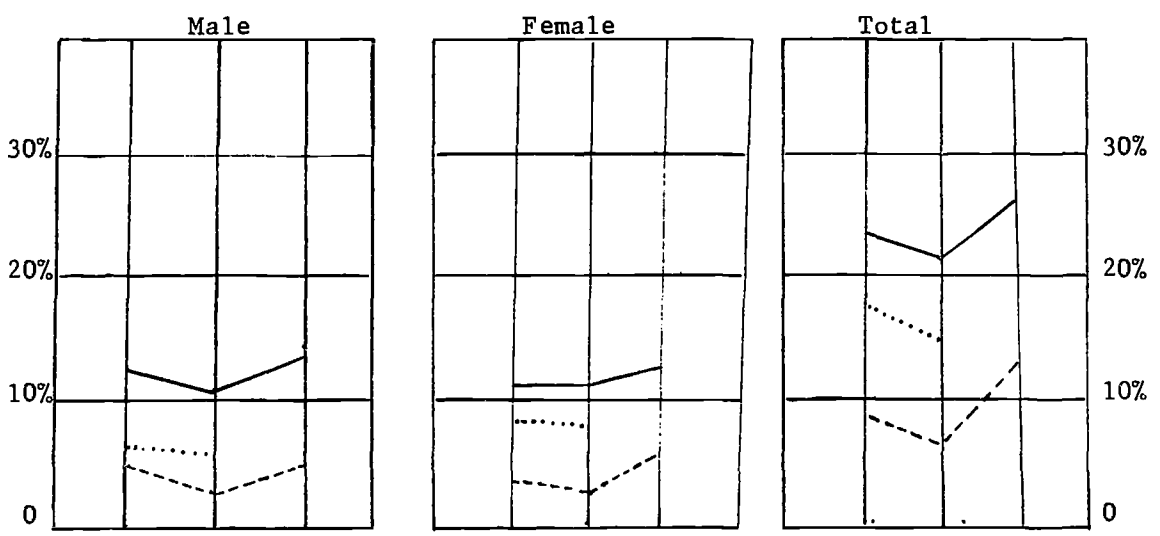

Industrial Arts

East High School _____
Kearns High School ----------
Clearfield High School .....

College Bound

The percentage of twelfth grade students expressing a written intention to go to college is relatively constant over time, but varies widely between schools. Totals range from 27 to 43 percent at Kearns, from 42 to 59 percent at Clearfield, and from 71 to 74 percent at East. These figures may not reflect student aspiration, but rather different efforts to get students to write a statement of intention.

Figure IX




Eash High School _____
Kearns High School ----------
Clearfield High School .....

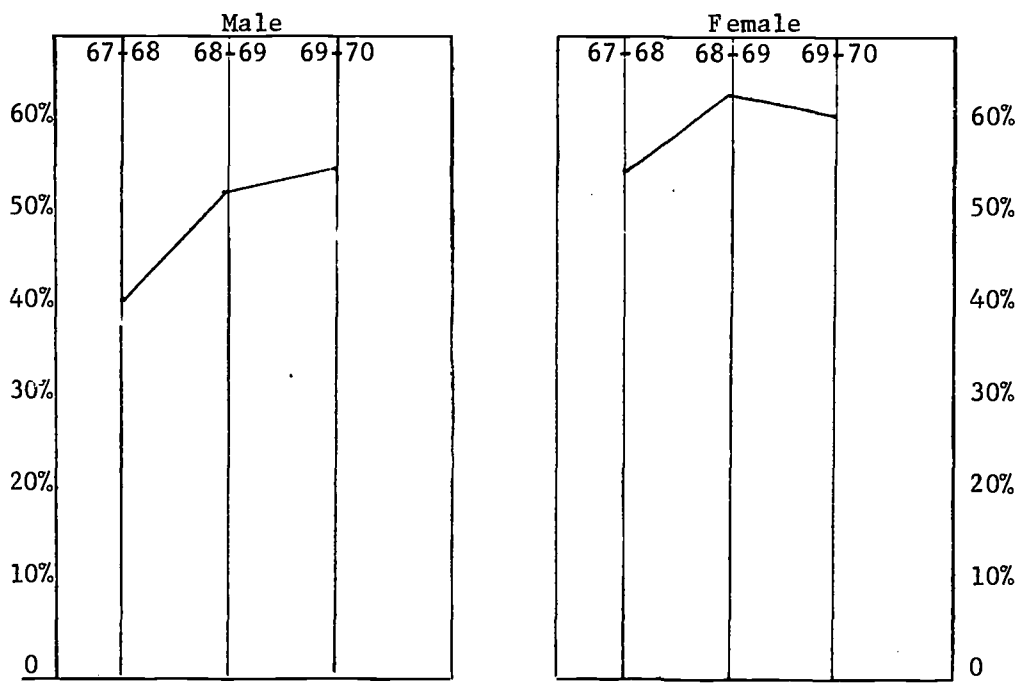
Total Vocational Enrollment

The percentage of male enrollment in vocational courses has increased steadily during the past three years. Female enrollments, on the other hand, reached a peak in 1968-69, and decreased in 1969-70.

Figure X

Percentage Of School Population Enrolled In Vocational Programs

Duplicated Count




Three School Vocational Enrollment

In general, most of the students completed the programs in which they were enrolled. (See Table 1). The exception is Kearns High School, which reports that of those enrolled in courses only 12% to 60% complete the programs. It would seem that Kearns is using different criteria of completion than the other two schools.

TABLE 1

Percentages of Enrolled Students
Who Completed Programs

| | Kearns | | | Clearfield | | | East | | |
|---|---|---|---|---|---|---|---|---|---|
| | May 68 | May 69 | May 70 | May 68 | May 69 | May 70 | May 68 | May 69 | May 70 |
| 01 Agriculture | | | | 90 | 84 | 88 | | | |
| 04 Distributive Education | * | * | 69 | 80 | 66 | 100 | 100 | 96 | 88 |
| 07 Health | | | | | | | | 100 | 100 |
| Home Ecomonics (Gainful) | | | 14 | | | | | 94 | 97 |
| Home Economics (Useful) | | | 04 | 100 | 100 | 100 | 95 | 98 | 97 |
| 14 Office | | | 12 | 100 | 100 | 100 | 101 | 97 | 94 |
| 17 T & I | | | 12 | 100 | 100 | 100 | 93 | 87 | 90 |

* not reported

## OBJECTIVE RATINGS

A three school average rating of achievement of criteria was computed as follows: Responses from schools and curriculum specialists were pooled and weighted equally; these results are reported in Table 2. Mean criteria ratings were determined for General Administrative, Guidance/Placement, Specific Vocational, and Interdisciplinary Support Criteria.

TABLE 2

Mean Ratings of Achievement of Objectives
Ratings range from a low of 1.00 to a high of 4.00.

| | |
|---|---|
| General Administrative | 2.98 |
| Guidance/Placement | 2.87 |
| Specific Vocational | 2.85 |
| Interdisciplinary Support | 3.05 |
| Mean of Above Ratings | 2.93 |

Though the interpretation of these ratings is confounded by the limitations stated above, they are generally encouraging. The mean rating of all programs was 2.93, indicating that the programs have not met the stated criteria, but have approximated them.

## SUMMARY CONCLUSIONS, AND RECOMMENDATIONS

During the past three years the proportion of students enrolled in vocational courses has increased or remained stable except office occupations, which showed a decrease in enrollment during 1969-70.

The most striking enrollment trend was the increase in students enrolled in vocational courses at East High School, rising from 18%, to 25%, to 34% of the total school enrollment.

Given a scale where: "4" indicates that the program is adequate and functioning well; "2" indicates that a large amount of additional support is needed; the overall effectiveness of the program is 2.93.

This indicates that the program needs further development, but is generally adequate. The ratings of objectives and criteria provided for each school provide clues for improving the program.

Information provided by curriculum specialists, project coordinators, and other school personnel, provided the basis for the following suggestions. It is recommended:

1. That the stated curricular objectives be expanded and classified into units that are taxonomically logical and useful.

2. That the curricular and instructional objectives be edited and distributed to interested personnel, including students, as soon as possible;

3. That the rating sheets used by teachers be designed to allow the client responses to three or more considerations:

   a. Importance of the objective,
   b. How well the objective was achieved,
   c. How much help the school staff needs to achieve the objective,
   d. Additional comments on means to achieve the objective.

4. That a uniform method of keeping records of the achievement of each student on each curricular level objective be devised and utilized;

5. That all cooperating schools use a uniform method of keeping records of enrollment and completion of programs.

6. That a midyear assessment of the program be made by the coordinators, teachers, and school-community representatives, this evaluation to be distributed to the school staff for their use.

7. That the relevance of programs to "on the job" requirements be assessed by craft committees who were not involved in curriculum planning, and;

8. That long range assessment be integrated with Project Follow-Up, and include investigation of employers', parents', and students', evaluation of the effectiveness of the program, and the use of job satisfaction as one criterion of success.

APPENDIX A

Objective Rating Lists

VOCATIONAL EDUCATION AND OCCUPATIONAL OPPORTUNITIES

Administration

Criterion: The administration insures that the vocational education program is responsive to changing job requirements and labor market needs.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrge.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Advisory committees representing knowledge of the occupations for which instruction is offered are formed and utilized on a continued basis . . . . . | | | | | |
| b. A public information program operates on a continuing basis to furnish members of the community with knowledge of vocational program offerings. | | | | | |
| c. Administration is familiar with the regulations, procedures, and goals stated in the Utah State Plan for Vocational Education . . | | | | | |
| d. Provisions have been made for regular and adequate follow-up of students who have been enrolled in the vocational education programs . . . . . | | | | | |
| e. Student placement personnel have established effective liaison with local employers and employment agencies . . . . | | | | | |
| f. Local employers and employment agencies are kept informed of vocational education curriculum patterns being offered . . . . . | | | | | |

2. Criterion: The administration plans and organizes a statement of future needs including costs for administration, guidance services, instruction and facilities.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. An in-school vocational education planning committee has been established. | | | | | |
| b. The committee meets with the occupational advisory committees to review needed future expenditures for new and revised program offerings. | | | | | |
| c. Priorities of expenditures are formulated in terms of the requirements of students and of state and local labor market trends. | | | | | |
| d. Expenditure needs are projected for two years ahead. | | | | | |
| e. Cost norms per student for vocational education programs have been computed. | | | | | |
| f. Need for future expenditures have been substantiated by past cost trends. | | | | | |

B. Guidance and Placement Services

1. Criterion: Students are helped to select a vocational curriculum on the bais of their capacity to succeed in the occupation or occupational cluster for which instruction is provided.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Employment opportunities available to persons with special handicaps are identified on a continuing basis. | | | | | |
| b. Students involved in actual work experience situations are adequately screened. | | | | | |
| c. Students are provided with occupational exploration experiences. | | | | | |

2. Criterion: The School-Community Representative maintains accurate and current information about employment opportunities in state and local labor markets.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1. Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Information channels between employers, employment agencies and the school-community representative are established and used. | | | | | |
| b. Labor market data are received periodically, organized, and made available to students and instructional staff in a usable form. | | | | | |
| c. Local employers and employment agencies are informed of the occupational qualifications of students completing vocational curriculum patterns. | | | | | |
| d. The school-community representative meets regularly with the occupational advisory committees. | | | | | |
| e. Training stations are obtained for cooperative work-study programs. | | | | | |
| f. Students moving directly from high school to the world of work are assisted in obtaining jobs. | | | | | |

C. Program Offerings

1. Criterion: Program is designed to enable students to develop competencies necessary for further education or entry employment in the recognized occupations upon completion of the program.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Program requirements are developed with advice and counsel of persons knowledgeable of occupational requirements. | | | | | |
| b. Programs are of sufficient length to assure employability of completing students. | | | | | |
| c. Programs are of sufficient depth to assure employability of completing students, | | | | | |
| d. Programs are oriented to current business and industrial practices. | | | | | |
| e. Occupational advisory committees are satisfied that vocational programs adequately prepare individuals for employment in occupations for which instruction is provided. | | | | | |
| f. Provisions are made to modify programs on the basis of employer evaluations of graduates' work performance. | | | | | |
| g. The program is adequately articulated between the high school and post high school levels to minimize unwarranted duplication of instruction | | | | | |
| h. The curriculum stresses to an appropriate degree the importance of meeting production type deadlines. | | | | | |

2. Criterion: There are substantial and identified opportunities for employment in the recognized occupations taught.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Employment opportunities in the state and local labor markets have been identified. | | | | | |
| b. Employment opportunity data are up-dated on a continuing basis | | | | | |
| c. Individuals on occupational advisory committees assist in relating labor market data to labor market needs. | | | | | |
| d. An operation procedure has been established for making changes in content of courses as new information about job requirements is accrued. | | | | | |
| e. This operational procedure is fully utilized to reduce time lags between decision making on basis of new information and implementation of decisions for program development and improvement. | | | | | |

3. Criterion: The vocational education program is designed to qualify individuals for employment in a variety of related jobs rather than in a single narrowly defined job.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Curriculum and course content are based on an analysis of the occupations for which instruction is given. | | | | | |
| b. Common knowledge skills in the related occupations have been identified. | | | | | |
| c. Identified knowledge and skill requirement clusters are substantiated by occupational advisory committees. | | | | | |
| d. Program and curriculum objectives have been developed in detail. | | | | | |
| e. The vocational education program is regularly evaluated for its effectiveness in enhancing graduates' occupational mobility and reducing unemployment time for job adjustments. | | | | | |

D. Facilities

1. Criterion: Facilities and equipment are comparable to conditions and equipment used in actual working situations.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Facility and equipment requirements are developed with advice and counsel of knowledgeable persons. | | | | | |
| b. On-site inspection of business and industrial work settings are made as a means of determining adequacy of facilities and equipment. | | | | | |
| c. Number and types of equipment and training stations are adequate. | | | | | |
| d. Work methods and materials are comparable to those used in actual working conditions. | | | | | |

4. Criterion: The vocational education program is developed and conducted with the advice of an occupational advisory committee.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The occupational advisory committee is composed of employers and other persons possessing current and substantial knowledge of the occupations for which instruction is offered. | | | | | |
| b. Each curriculum pattern has a separate occupational advisory committee or sub-committee comprised of persons possessing up-to-date and substantial knowledge of the occupation or group of closely related occupations for which instruction is offered. | | | | | |
| c. Representatives of employers and qualified workers from the occupations concerned serve on the advisory committee. | | | | | |
| d. Representatives from post-secondary institutions serve on the advisory committee. | | | | | |

E. Instruction

1. Criterion: Instruction is based on skills and knowledge required in the occupation or cluster of closely related occupations.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Curriculum and instructional objectives guide the instructional process. | | | | | |
| b. Instructors are provided adequate time and allowances to maintain their occupational competencies. | | | | | |
| c. Learning experiences in the shops and laboratories are comparable to actual working conditions. | | | | | |
| d. Each student receives adequate assistance and class time to achieve occupational skill proficiencies. | | | | | |
| e. Instrucational personnel possess competency in the occupation or occupations for which instruction is provided. | | | | | |
| f. Advice of the occupational advisory committee is sought when reviewing occupational qualifications of potential vocational instructors. | | | | | |
| g. The instruction stresses to an appropriate degree the importance of meeting production deadlines. | | | | | |
| h. The program of instruction provides students the opportunity to observe or participate in on-the-job situations in the field of his choice in his community. | | | | | |

Guidance Program Evaluation

1. Criterion: Appropriate students enrolled in vocational programs.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Criteria appropriate for the selection of students to enter curriculum have been established. | | | | | |
| b. These selection criteria were used to help each student choose a vocational program in which to enroll. | | | | | |
| c. The Occupational Advisory Committee advised on the appropriateness of these selection criteria as related to requirements of occupational clusters. | | | | | |
| d. Meetings have been held for students by the end of their 10th grade, and for their parents, to explain the schools' course offerings and entry criteria. | | | | | |
| e. By the end of the 10th grade each student has recorded his broad occupational area of interest. | | | | | |
| f. The counselor maintains an "information card" for each 10th grade student, and updates them annually. | | | | | |
| g. Students' education programs were reviewed annually to insure compatibility with occupational goals | | | | | |
| h. Appropriate students enrolled in vocational programs. | | | | | |

2. Criterion: Appropriate student occupational goals are recorded and kept current.

| | ADDITIONAL SUPPORT IS NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Appropriate aptitude, interest, and achievement tests are prescribed for grade levels 9, 10, 11, and 12. . . . . | | | | | |
| b. Counselors have interpreted test results for each student . . . . . | | | | | |
| c. Students have prepared "profile cards". . . . | | | | | |
| d. Counselors have prepared "information cards". . | | | | | |
| e. Tenth grade students have explored at least three occupational fields of their choice | | | | | |
| f. Eleventh grade students' occupational and educational goals have been reviewed . . . . . | | | | | |
| g. Twelfth grade students' occupational and educational goals have been reviewed. . . . . | | | | | |

3. Criterion: Students enlisting in the armed services selected the most appropriate military career field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The students were able to describe their service options . . . . . | | | | | |
| b. The students were advised as to which arm of the service and which specialty area seemed most appropriate for his aptitudes, skills, and desires . . . . . | | | | | |
| c. Close coordination was effected with the assigned ROTC instructor or the local recruiting offices. . . . . | | | | | |
| d. Students made appropriate military enlistment selections. . . . | | | | | |

4. Criterion: Students continuing their vocational/technical education at the post-secondary level selected schools and programs compatible with their career goals.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students were familiar with the Utah schools and programs that provided appropriate education and training opportunities in their chosen field . . . . . | | | | | |
| b. Appropriate entry forms were available for student completion. . . . | | | | | |
| c. Assistance was available in completing the forms | | | | | |
| d. Student and parent consultations were scheduled to discuss post-secondary programs . . | | | | | |
| e. Students enrolled in appropriate post-secondary programs . . | | | | | |

5. Criterion: Close coordination was maintained with the school/community representative.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Periodic meetings were scheduled with the school/community representative. . . . . | | | | | |
| b. Personnel records for vocational students are available to the school/community representative | | | | | |

Agriculture

Criterion: Students enrolled in agricultural programs will demonstrate the knowledge and skills required for success in agricultural occupations.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. From lectures on agricultural vocations given by resource personnel, the learner will write and give to the teacher a short report on the information he has received. | | | | | |
| b. Students describe and document in writing three career choices in which he is most interested. | | | | | |
| c. Students will write a short report on useful knowledge gained during field trips to agricultural establishments. | | | | | |
| d. Students score 80% or more on a safety test covering appropriate safety topics. | | | | | |
| e. From samples of 30 commonly used hand tools, students list the proper use and maintenance for a minimum of 20 tools from this group. | | | | | |
| f. Each student successfully sharpens at least two cutting tools during the first semester. | | | | | |
| g. Students sketch and label the principle parts of a building; and identify the prime purpose of each. | | | | | |
| h. Students compare various roof types and categories as to strength, cost and practicality. | | | | | |
| i. Given samples of 20 commonly used electrical items (various switches, outlets, etc.) students identify and list the proper uses of at least 15 samples. | | | | | |
| j. Students construct a working model of a 3-way switch, convenience outlet, and a 2-circuit fuse or breaker box. | | | | | |

Agriculture (Continued)

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| k. On a Briggs and Stratton engine or engine chart, students identify principle engine features, including: block, carburetor, starter, and ignition. They then disassemble, reassemble, and adjust an engine to its best operation potential. | | | | | |
| l. East student recognizes and can name at least 8 different types of weld (both gas and arc) and welds 3 joints using either process. These meet beginning AWS standards. | | | | | |
| m. G ven samples of E-6011, E-6013, E-6024 and nickel base alloy electrodes, students properly identify each electrode, adjust machines properly for the job being done, and make either a butt or lap weld with each electrode. | | | | | |
| n. Students demonstrate knowledge of farm equipment and how to use it by researching and writing a report on common pieces of farm equipment. This report compares principles of operation from both operational and maintenance points of view. | | | | | |

Agriculture

Criterion: Students of agriculture will demonstrate a broad spectrum of knowledge and skills required for employment in agricultural industries.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate knowledge of appropriate ornamental shrubs by constructing a chart of at least 15 shrubs that are adaptable to Northern Utah, and listing the management factors required for their proper growth. | | | | | |
| b. Students demonstrate knowledge of appropriate shade trees by selecting, from a list of 15 shade trees commonly grown in Northern Davis County, 10 trees, and preparing a resume for each listing the physical appearance, growth habits, maintenance required, and best areas suited to the type of tree. | | | | | |
| c. Students demonstrate necessary grafting skills by preparing either samples or drawings of 5 different types of budding or grafting. | | | | | |
| d. Students demonstrate necessary knowledge of noxious weeds, by compiling from the official list of noxious weeds for the State of Utah, a chart of at least 10 weeds and list recommended practices and procedures for their control. | | | | | |
| e. Students list three major elements and eight trace elements commonly found in commercial fertilizers, and explain the contribution of each to plant growth with 80 percent accuracy. | | | | | |
| f. Students compile a chart comparing methods of applying irrigation water including: quantity, uniformity, cost, length of time to apply, and influencing features. | | | | | |
| g. Students describe indicators by which plants show their need for water. | | | | | |

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| h. Students describe lawn grasses and lawn mixtures recommended for Northern Utah and report on proper lawn maintenance. | | | | | |
| i. Students describe the differences between formal and informal types of landscaping. | | | | | |
| j. Students prepare a sketch of a home and grounds, list the plants that they will use, and their landscape locations about the home. | | | | | |
| k. Students compile a chart of recommended landscape plants for Northern Utah. They show: the physical appearance, maintenance required, and the primary use for each plant. | | | | | |
| l. Given different samples of soil, students identify the texture of each five texture groups with 90 percent accuracy. | | | | | |
| m. Upon visiting different land sites students classify each site into one of eight land capability groups considering soil texture, slope, drainage, alkali content, and climatic conditions. This will be done with 90 percent accuracy as determined by the instructor. | | | | | |
| n. The students correctly identify the male and femal plant parts and describe the process of pollination with 100 percent accuracy. | | | | | |

Agriculture, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| o. Given appropriate laboratory set-ups, students demonstrate the process of absorption, respiration, osmosis, and translocation of nutrients. | | | | | |
| p. Given samples of tree cuttings, students correctly cuplicate the propigation of plants by budding, grafting and tip layering samples of six trees with 70% success. | | | | | |
| q. Given a list of 15 landscape symbols, students duplicate 10 of them in a home landscape drawing that the instructor considers satisfactory. | | | | | |
| r. Given pictures of 10 different landscaped homes, students identify the service, public and private, areas of each with 100% accuracy. | | | | | |
| s. Given a list of 30 different trees, shrubs and flowers, students identify and explain the best use for 25 of them. | | | | | |
| t. From pictures of 6 common dairy cattle breeds found in this area, students correctly identify each breed and explain advantages and disadvantages of each as well as list average butterfat production and pounds of milk produced for each breed with 85% accuracy. | | | | | |
| u. Given pictures of 8 common breeds of beef cattle, students correctly identify each breed and list major advantages and disadvantages of each with 100% accuracy. | | | | | |
| v. From a list of 10 breeds of sheep, students correctly identify and list major advantages and disadvantages of each breed with 85% accuracy. | | | | | |

Agriculture, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| w. From samples of major wool classes, students identify 4 different grades of wool and list uses of each with 90% accuracy. | | | | | |
| x. From pictures of 6 different swine breeds, students identify each breed and list major advantages and disadvantages of each with 90% accuracy. | | | | | |
| y. From a list of 25 diseases of livestock students describe symptoms and control measures for each disease with 80% accuracy. | | | | | |
| z. From samples provided, the learner will identify five different external and five different internal parasites and list their control measures with 100% accuracy. | | | | | |

Criterion: Students enrolled in the air-space science program will demonstrate the knowledge, skills, and attitudes necessary for employment in at least one air space vocation.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students point out on any general aircraft at least 25 components and tell what the function of each is and its limitations with accuracy of 90 percent as judged by a person familiar with that particular type of aircraft. | | | | | |
| b. Students make a list of 50 job opportunities in aviation or its related fields and from this list compile two shorter lists. One will consist of 10 careers that this person could not stand as a lifetime career, personally, and a brief (one sentence) explanation as to why each of the listed careers is unacceptable to him. The other list will be ten most desirable careers for this individual with, again, a one sentence explanation as to why this career would satisfy him. | | | | | |
| c. Students read 20 teletyped reports from the U.S. Weather Bureau with 95 percent accuracy. | | | | | |
| d. Students utilize the services of the Weather Bureau (i.e. Broadcasts, SIGMETS, PIREPS, AIRMETS, sequence reports, and terminal forecasts), make observation of the local present conditions, and forecast correctly 30 percent of the time the weather for the next 12 hours in his locality. | | | | | |
| e. Students correctly use the navigation procedures of dead reckoning and navigation aids to compute and navigate a hypothetical course to an airport at least 50 miles away. | | | | | |

Trades and Industrial Education - Air Space Science

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1<br>Need is Critical | 2<br>Lrg. Amt. Needed | 3<br>Some Needed | 4<br>None Needed | Not Applicable |
| f. Students demonstrate understanding of the rules of aviation as set up by the FAA. This understanding will be demonstrated by a panel debate on the rules with the students being able to argue pro and con on the rules. | | | | | |
| g. Students demonstrate proper knowledge of, and attitudes toward, flying, the availability of jobs in the area of aviation, and the worthwhileness of schools by participation in the flight activities, the field trips, and the lecture sections with guest speakers. | | | | | |

Vocational Electronics

Criterion: Vocational Electronics students will demonstrate basic knowledge and skills required for employment in vocations requiring a well founded back ground in fundamental electricity and electronics.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Each student solves electrical circuit problems rapidly with 80 percent accuracy. Problems require basic arithmetical operations, powers of 10, conversions, algebraic relationships, trigonometric, and formulas using the slide rule. | | | | | |
| b. When asked in an oral or written examination, students state or write basic laws, theories, and definitions relative to the physical world including atomic structure, conductors, insulators semi-conductors, static electricity, free electrons, measurement, work, energy, power, energy and power sources. | | | | | |
| c. When asked in an oral or written examination, students state or write definitions, laws, symbols, and notation for voltage, current, resistance, capacitance, inductance and power as related to d-c circuits with 80 percent accuracy in time specified for test. | | | | | |
| d. When given the following meters, each student correctly uses acceptable procedure to make the electrical measurement with each in a specified time: voltmeter, ammeter, ohmeter, and multimeter. | | | | | |
| e. When given an oral or written examination, students solve series-circuit problems, voltage-divider problems, parallel-circuit problems, current-divider problems, combination-circuit problems, and balanced-bridge circuit problems, using Ohm's Law, Watt's Law, and circuit notation for d-c circuits with 80 percent accuracy in specified time. | | | | | |

Vocational Electronics, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Crit'cal | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| f. When given an oral or written examination, the students solve 10 circuit problems involving the use of Kirchoff's Law, superposition theorem, Thevenin's theorem, and Norton's theorem with 80 percent accuracy. | | | | | |
| g. When given an oral or written examination, students state or write the basic laws, theories, and definitions relative to magnets and magnetic effects, magnetic polarity, magnetic force, electromagnets, and electromagnetic induction with 80% accuracy in the specified time. | | | | | |
| h. When given an examination, students list the parts, explain the operation and draw a circuit diagram for five different meters. | | | | | |
| i. When given an oral or written examination, students state or write basic laws, theories, and definitions relative to the properties of inductance, inductive effects in d-c circuits, induced voltages and energy storage inductors in series, inductors in parallel, and types and uses of inductors with 80 percent accuracy in the specified time. | | | | | |
| j. When given an oral or written examination, students state or write basic laws, definitions, and solve circuit problems for properties of capacitance, Coulomb's Law and energy storage, R C time constants, capacitors in series, capacitors in parallel, capacitors in series-parallel, and types and uses of capacitors with 80 percent accuracy in specified time. | | | | | |

Vocational Electronics, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| k. When given 10 circuit malfunctions, students diagnose, predict and correct circuit fault using analytical ability, correct procedure, measuring instruments in time limits specified. | | | | | |

Technical and Industrial Education/Graphic Arts

Criterion: Students enrolled in graphic arts will demonstrate the knowledge and skills necessary for employment in some graphic arts industry.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Given appropriate samples students differentiate and name the various types of binding, padding, wire stitching, side wire stitching, side wire stapling, saddle wire stitching, mechanical binding and case binding. | | | | | |
| b. Students identify various kinds of paper and are able to demonstrate an appropriate use of each. | | | | | |
| c. Each student learns how to hand set type and sets up a job and runs it on the hand fed platen press. | | | | | |
| d Students follow all safety practices as instructed by the teacher and show their knowledge of safe practices by taking an oral safety test on each machine before running a job. | | | | | |
| e. Students properly set up a camera and tripod. | | | | | |
| f. The students demonstrate their knowledge of the various kinds of type and its many uses and how it is set up, composed, measured, made, and spaced by passing a written test on the subject. | | | | | |
| g. Students are able to differentiate between the standard proofreading symbols and demonstrate their use on sample manuscripts. | | | | | |
| h. Each student demonstrates his skills in the use of darkroom procedures and camera, Kodak and 3-M film, and the developing techniques needed in the production of plates. | | | | | |

Graphic Arts, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| i. Students demonstrate the steps necessary in the proper preparation, exposure and development of the pre-sensitized metal plates as well as the preparation of the offset paper masters | | | | | |
| j. Students use a standard routine of setting up the offset presses in the shop. | | | | | |
| k. Students run different sizes of paper and know how to make the adjustments for these sizes on an offset press. | | | | | |
| l. Students determine the best size aperture and adjust a camera accordingly | | | | | |
| m. Students find the best length of exposures for camera setups. | | | | | |
| n. Students set up the camera and make all computations for paper exposures of the halftone negative and strip the flat and run a good copy on the offset press. | | | | | |
| o. Students set up copy and make a silk screen for photographic stencils and produce good copy. Students do one and two color jobs. | | | | | |
| p. Students plan a two-color offset job. Prepare camera-ready copy and separate it for color using overlays. The students make the negatives and strip the flats, burn the plates and run the job. | | | | | |
| q. Students demonstrate skills needed in posterization by handing in a sample of his work. | | | | | |

Computer Science

Criterion: Students enrolled in computer science programs will demonstrate the knowledge of the need for and capabilities of computers, career opportunities in the field and skills necessary for solving practical problems using computer programming.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate that they understand the twentieth century impact of the computer by correctly identifying at least five scientific, business, and industrial occupations that have been affected by the computer and by describing accurately some of the factors in each of these occupations that require the use of the computer. | | | | | |
| b. Students identify eight broad categories of careers in computer technology. This is done orally or by a written test. | | | | | |
| c. Students demonstrate that they know the difference between analog and digital computers by identifying correctly the characteristics of each of these devices. This is done orally or on a test basis. | | | | | |
| d. Given a computational problem, students identify the necessary data and computational steps that must be supplied to the computer and the necessary instructions that must be given to the computer to produce output. | | | | | |
| e. Given the pictures of selected input-output devices and offline hardware, students correctly name the devices and identify major functional features of each of these devices. | | | | | |
| f. Students punch a correct source deck for a given computer program | | | | | |
| g. Students describe advantages and disadvantages of selected devices including storage devices. | | | | | |
| h. Students demonstrate that they understand the concept of 0-1 systems by passing tests over the material with at least 70 percent accuracy. | | | | | |

Computer Science - Page 2

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| i. Students decide correctly (within given confidence limits) according to teacher specification whether or not two or more samples come from the same population. | | | | | |
| j. Students construct regression curves and infer the outcome of a future event with a given level of confidence according to teacher specifications. | | | | | |
| k. Students write and debug a fortran program to do all of the calculations necessary to accomplish the two objectives immediately above. | | | | | |

Industrial Education - Industrial Plastics

Criterion: Students enrolled in industrial plastics programs will demonstrate proficiency in a salable skill that is needed in the plastics industry.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate, according to the instructions given, the proper and safe use of all machines and power equipment. | | | | | |
| b. Students answer the questions on a machine and equipment saftey test with a score of 90 percent or better. | | | | | |
| c. Students, upon close examination and testing of various plastic articles provided, place each item into its general classification according to its physical properties. | | | | | |
| d. Students, as each area of manufacturing processes are studied, produce three items demonstrating each process (assuming equipment is available.) | | | | | |
| e. Students choose an area of concentration in which they design and construct a mold. With this mold they produce a product using one of the plastics laboratories. | | | | | |
| f. Upon completion of the above mold, each student will produce three items from the mold--one for himself and two for the instructor | | | | | |

Auto Mechanics

Criterion: Auto mechanics students will demonstrate the knowledge and skills required of employable auto mechanics.

| | ADDTIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Given the proper tools and equipment, students explain the operation of the engine in written form, perform servicing, testing, and properly troubleshoot malfunction of the engine. | | | | | |
| b. With the proper tools and equipment students explain the operation and perform servicing of the cooling system. | | | | | |
| c. Furnished with an automobile, students make a visual inspection of all fuel lines, remove, clean, repair or replace, and perform the necessary servicing of the fuel system to meet manufacturers specifications. | | | | | |
| d. Students diagnose malfunctions, perform servicing of the electrical system to meet manufacturers specifications. | | | | | |
| e. Given a live laboratory, students shall remove and replace a clutch and have it functioning correctly within the time designated in the flatrate manual, plus allowance of 25%. | | | | | |
| f. Given proper tools and equipment, students explain the operation, perform servicing, testing and properly troubleshoot malfunctions of the chasis to meet the specifications of a given manufacturer. | | | | | |
| g. Given an automobile, students perform the necessary servicing, testing and properly troubleshoot malfunctions of additional equipment used on the vehicle. | | | | | |

Building Trades

Criterion: Students enrolled in the building trades program will demonstrate the knowledge and skills necessary for employment in at least one building trade vocation.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students identify and read structure blueprints with no errors when blueprint gives elevation, structure systems, and internal detail. | | | | | |
| b. The student will demonstrate that he knows materials well enough to identify accurately 80 percent of those used in a specific building. | | | | | |
| c. Students practice safe work procedures to the extent that there are no violations of published state and district safety standards. | | | | | |
| d. Students demonstrate proper use of each tool and machine in the school shop well enough to produce squareness and dimensions shown in a plan with no surface defects. | | | | | |
| e. Each student produces an example of basic finish construction that contains at least seven joints, a plastic laminant application, frame and panel construction, drawer, leg and rail construction, casement, and doors, that is accountable to plan. | | | | | |
| f. Each student produces an example of each type of basic rough construction that will pass an F.H.A. inspection in the school shop or on the job site. | | | | | |
| g. Each student prepares a written description of the building construction requirements well enough to get a building permit. | | | | | |
| h. Each student prepares a written and graphic description of requirements for job entry and availability of jobs in region and state so as to be in harmoney with employment security data. | | | | | |

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| i. Students plot a sequence of training and class requirements for entry level position well enough that he can identify all the training and confirm its availability through to job entry. | | | | | |
| j. Each student documents his aptitude and desires from at least six different sources well enough that parent, student, and teacher mutually agree to his occupational choice. | | | | | |
| k. Each student arranges and participates in an on-the-job or cooperative experience with a person or firm in the area of his training and describes accurately a typical work day. | | | | | |
| l. Each student will be a member of the V.I.C.A. club to the extent that he is an active participant. | | | | | |

Drafting

Criterion: Students enrolled in drafting programs will demonstrate knowledge and skills required of vocations requiring drafting skills.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students enrolled in the two-hour vocational drafting programs are members in the V.I.C.A. Club and participate in Club activities. | | | | | |
| b. Each student demonstrates his skill in the practical application of size description as it relates to shape description, tolerancing as used in interchangeable manufacture, and the use of standard tables, by constructing drawings involving use of spacing, class of fits and standard tables. | | | | | |
| c. Each student demonstrates his skill in solving development and intersection problems involving prisms, pyramids, cylinders, and cones by constructing perspective drqwings involving each of these shapes. | | | | | |
| d. Each student demonstrates his understanding of three-dimensional descriptive geometry by correctly solving space or solid analytic geometric problems. | | | | | |
| e. Given a blueprint showing the relationship between three views of an object, students demonstrate their ability to interpret the blueprint by identifying the larger and more general concepts conceived by it, and to recognize and specify the limits within which the interpretations can be drawn. | | | | | |
| f. Shown pictures of ten types of screw threads, students are able to recall, list and draw five of the ten screw thread representations a week after presentation of the pictures. | | | | | |
| g. Students identify and draw sketches and letters, while maintaining neatness and accuracy. These must meat A.S.A. standards. | | | | | |

Drafting, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| h. Each student identifies all sectional views used in making a working drawing with 100 percent accuracy. | | | | | |
| i. Students will identify and are able to differentiate the areas (architectural, electrical, mechanical, etc.) of drafting. | | | | | |
| j. Students list technical terminology dealing with the manufacturing processes and machine operations used during productions by modern day industry. | | | | | |
| k. Students identify and construct pictorial drawings in axonometric projection, oblique projection, and perspective. They meet the time and degree of accuracy set by the instructor. | | | | | |

Communications - Television

Criterion: Students enrolled in television programs will demonstrate the knowledge and skills necessary for employment in the television industry.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate their knowledge of the vocabulary used in television by properly defining at least 30 of 40 terms given in a test. | | | | | |
| b. Students demonstrate their skills in operating the equipment in the television lab by placing the camera in an operating posture, executing correctly at least 12 out of 15 directions given by the instructor, and securing the camera. | | | | | |
| c. Students attend vocational orientation lectures and complete at least one application for employment in television. | | | | | |
| d. Given the proper techniques in sound, lighting, and setting, each student demonstrates his understanding of these areas by producing a three-minute television presentation. | | | | | |
| e. Students demonstrate their understanding of building dramatic effects through the use of movement and camera angles by planning and producing a five-minute dramatic sketch on television. | | | | | |
| f. Students demonstrate their understanding of writing and preparing a television script by submitting an original prepared for production to the teacher. | | | | | |
| g. Students show their understanding of directing by directing their original scripts. | | | | | |
| h. For three marking periods, each production team produces at least two television shows per marking period. | | | | | |

Office Occupations

Criterion: The office occupations student will demonstrate proficiency in skills required of employable secretaries.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students type five forms of business communications in mailable form under classroom conditions. | | | | | |
| b. Students type 40 w.p.m. with fewer than five errors, in a five-minute writing, under test conditions. | | | | | |
| c. Students describe and document at least 20 examples of essential traits and attitudes which are acceptable to the Advisory Committee and cite 10 instances where they were exercised by students in the school, work, or home setting. | | | | | |
| d. Students take unpreviewed dictation at the rate of at least 80 w.p.m. for three minutes and transcribe into typewritten form with at least 95 percent accuracy. | | | | | |
| e. Students operate four different types of business machines with at least 80 percent accuracy under test conditions. | | | | | |
| f. Students produce accurate written descriptions of at least five duplicating processes and prepare masters for at least two different duplicating machines from which they produce legible copies under classroom conditions. | | | | | |
| g. Students type, in mailable form, at least 10 letters or manuscripts from a transcribing machine. | | | | | |
| h. Students file random materials in retrievable form and code them in alphabetic, numeric, and geographic systems well enough that another person can interpret the system. | | | | | |

Office Occupations - Page 2

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| i. Students perform activities of the bookkeeping cycle including journalizing, posting, issuing financial statements, and closing accounts for service and merchandising business well enough that accounts balance. | | | | | |
| j. Students complete drills and problems dealing with the equipment and procedures used in manual, mechanical, punched card, and electronic data processing systems with at least 75 percent accuracy under test conditions and document five job opportunities in that field. | | | | | |
| k. Each student prepares application forms and passes an employment interview well enough that a person making a living in the field would agree the applicant is employable. | | | | | |
| l. Each student prepares a written and graphic description of requirements for job entry and availability of jobs in region and state so as to be in harmony with employment security data. | | | | | |
| m. Students plot a sequence of training and class requirements for entry-level position well enough that they can identify all the training and confirm its availability through to job entry. | | | | | |
| n. Each student arranges and participates in an on the job or cooperative experience with a person or firm in the area of his training well enough that he can describe accurately a typical work day. | | | | | |
| o. Each student is a member and active participant in a vocational club. | | | | | |

2. Criterion: Students enrolled in office occupations programs will demonstrate their ability to accurately apply appropriate mathematical concepts in the essential applications required by the business employees.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate acceptable procedures in making bank deposits verifying the deposits, maintaining personnel records, and reconciling bank balances. | | | | | |
| b. Students correctly calculate discounts using more than one method, and also calculate mark-ups and mark-downs. | | | | | |
| c. Students correctly figure simple interst rates (using the 6%-60 day technique and the more precise fractional method) and determine due dates. | | | | | |
| d. Students correctly calculate the interest on installment and credit purchases. | | | | | |
| e. Students correctly prepare a simple payroll involving different hourly rates and various deductions. | | | | | |
| f. Students make correct insurance calculations involving long and short term rate tables, premiums, and refunds. | | | | | |
| g. Students correctly measure the weight and dimensions of a given three-dimensional object, accurately calculate the volume and surface area, and express the answers in both the metric and U.S. dimensional systems. | | | | | |
| h. Students accurately compute compound interest and find an ordinary annuity. | | | | | |

Home Economics - Child Development and Family Relationships

Criterion: Students enrolled in child development and family relationships classes will demonstrate knowledge, attitudes, and skills of an adequate homemaker.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Each student identifies 10 personal experiences related to interaction with others, analyzes the action taken, and evaluates the solution in written form to the satisfaction of a panel of classmates or a panel of experts determined by the class. | | | | | |
| b. After viewing the film, "Four Families" each student identifies from a preliminary list, 12 examples of unique ways in which families meet the needs of their members. Each student cites in written form, a case study which illustrates three of the 12 examples. (Source of film - B.Y.U.) | | | | | |
| c. Each student selects one item from a list of technological advancements on the areas of foods, communications, and science and transportation; and orally describes and documents the effects of this change on today's family life. | | | | | |
| d. After playing the game, "Compatibility," each student lists 10 factors which affect mate selection and cites textbook references which justify the list. | | | | | |
| e. Each student is given six case studies from a collection of articles from "How Can This Marriage Be Saved" by Paul Popenoe (Ladies Home Journal), reads the problem and outlines in written form a recommended solution that will agree in three out of six cases with Dr. Popenoe's recommendation. | | | | | |
| f. From a list of statements related to prenatal care, each student identifies three items most vital to the physical and mental health of the expectant mother and justifies these items to the satisfaction of the class. | | | | | |

Home Economics - Child Development and Family Relationships - Page 2

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| g. Each student writes a daily time schedule for a mother with a newborn child, within a specific family structure (age span - size of family and income level), so that the needs of the specific family are met well enough to be acceptable to a panel of mothers. | | | | | |
| h. Each student makes a budget within a specific income level for a family with a first baby, justifies a priority list of expenditures well enough that there is no violation of budget restraints described beforehand. | | | | | |
| i. Each student participates in setting up and operating a play school. Each student completes 12 observation sheets provided to evaluate emotional, social and physical development, completes one in-depth study of interrelationships of one child and his mother, and completes with 70 percent accuracy an evaluative instrument designed to test knowledge of experience with children. | | | | | |
| j. Each student analyzes five situations, identifies causal hereditary and environmental factors and documents their analysis through authoritative sources with at least six references. | | | | | |
| k. When given a list of personality traits indicative of maturity and immaturity, students recall from past experiences and describe in written form ten examples of their own behavior which illustrates maturity and immaturity. | | | | | |
| l. Each student finds nine or more authoritative sources on family well being related to a particular family problem and describes the assistance available. Sources will include at least three agencies, two books, two current publications and two personal contacts. | | | | | |

Home Economics - Foods

Criterion: Students enrolled in foods occupations programs will demonstrate skills necessary for successful employment in food service occupations.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Given a set of ingredients, each student prepares, in the foods laboratory, a finished food product that meets established standards for that food type. | | | | | |
| b. Each student cites 20 misuses seen during the term and 15 tasks she personally has correctly completed in caring for equipment and utensils so as to be consistent with text materials and demonstrations. | | | | | |
| c. Students accurately match 50 given terms used in food preparation with the process or conditions involved. | | | | | |
| d. Students prepare documented descriptions of four food preservations processes and two samples of preserved food, one being frozen and one canned, having all characteristics of the documented description in the text. | | | | | |
| e. Each student describes orally the cultural background and participates in properly preparing and serving a meal typical of a foreign country consistent with a previously identified written description from a person, magazine, text, or other. | | | | | |
| f. Each student reports the results of a unique experiment with a scientific principle of food preparation and predicts the outcome in written form and well enough to prove the principle. | | | | | |

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1<br>Need is Critical | 2<br>Lrg. Amt. Needed | 3<br>Some Needed | 4<br>None Needed | Not Applicable |
| g. Each student writes one week's nutritionally balanced menus well enough to conform to the basic four food groups specified by USDA and with a variety in color, flavor, and texture. | | | | | |
| h. Each student selects six unrelated products. He describes the available variations of each product and selects the optimum one as well as documents the reasons for its optimum qualities well enough that no one can successfully refute the choice. | | | | | |

Homemaking - Clothing

Criterion: Students enrolled in Homemaking-Clothing courses will demonstrate knowledge and skills useful in the selection, design, and construction of clothing.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate basic clothing construction skills through the completion of four articles (skirt, jumper, Christmas project, and article of his own choice). | | | | | |
| b. Students identify the characteristics of a well constructed ready-made garmet by analyzing ready-made garments using a prepared check list of construction charateristics. | | | | | |
| c. Students classify man-made and natural fibers into their proper families and identify the characteristics of each family. | | | | | |
| d. Students identify common clothing care procedures and analyze how these relate to the life of an article of clothing by participating in a panel discussion. | | | | | |
| e. Students will demonstrate a basic knowledge of design principles, fitting techniques, pattern design, and advanced construction techniques by the designing and constructing of one or more articles of clothing. | | | | | |
| f. Students compare and contrast historic periods of fashion and identify the repetition of fashion trends on a written examination with a minimum of 60 percent accuracy. | | | | | |

Distributive Education

Criterion: Each student enrolled in distributive education programs demonstrate knowledge and skills necessary for choosing, acquiring, and holding jobs of their choice in the marketing field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Each student plots a sequence of training and class requirements for entry level position well enough that he can identify all the training and confirm its availability through to job entry as listed in the D.O.T. | | | | | |
| b. Each student identifies and reconciles personality traits with those specified by the Advisory Committee as necessary for job success well enough that teacher-coordinator and employer mutually agree that he is giving satisfactory performance. | | | | | |
| c. Each student role plays, or makes a written, verbal, or graphic description of a marketing sequence including sales, advertising, display, merchandise, operation, and management for a product of his choice well enough that a person who makes his living in the field would agree to its quality. | | | | | |
| d. Each student identifies and reconciles his social skills including grooming, human relations, personality, occupational adjustment, self concept, and leadership well enough for job success in his occupational choice as enumerated by the Distributive Education Advisory Committee. | | | | | |
| e. Each student identifies and reconciles his basic skills including business math, communications, and operation of business machines needed for job success in his occupational choice as judged by someone making a living in that field. | | | | | |
| f. Each student produces a written and/or graphic description of service and or product information of his choice (related to occupational area when possible) well enough to earn 70% of possible points in a DECA manual contest. | | | | | |

Interdisciplinary Math/Home Economics

Criterion: Home Economics students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their pre. ·red vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students compute work and power output in practical industrial problems | | | | | |
| b. Students solve mark-up and mark-down problems. | | | | | |
| c. Students solve problems involving trade discounts, cash discounts, and payment dates. | | | | | |
| d. Students compute wages on time basis including necessary deductions. | | | | | |
| e. Students correctly complete sample income tax forms. | | | | | |
| f. Students compute depreciation, selling loss, and selling profit. | | | | | |
| g. Students calculate interest on unpaid balance and average balance. | | | | | |
| h. Students determine proceeds on non-interest and interest bearing notes. | | | | | |
| i. Students compute commission fees, taxes on sales, accrued interest, interest payments, and rate of return on a given investment. | | | | | |

Medical Services

Criterion: Students enrolled in the medical services courses will demonstrate knowledge of some of the medical vocations, basic human anatomy and physiology and some skills needed in medical service vocations.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate knowledge of the history of hospital development, community health development, health occupations, and the development of terminology used in these fields by writing documented reports on three of the four named areas and orally summarizing one as specified by the instructor. | | | | | |
| b. Students diagram the offices of hospital management and the community outline of officials with no errors and explain the responsibilities of each office. They also briefly describe the roles of each specified member of the medical team with 90 percent accuracy. | | | | | |
| c. Students demonstrate knowledge and attitudes which are appropriate as he relates to himself, his employer, other employees, the patient, and the patient's family by identifying 10 mental mechanisms leading to undesirable behavioral changes and by role playing situations of interaction between the above people. | | | | | |
| d. Students name and explain the functions of the five major divisions of the city health department. | | | | | |
| e. Students identify 15 common infectious diseases by symptoms, cause, prevention, and treatment with 75 percent accuracy. | | | | | |
| f. Students demonstrate knowledge of anatomy and physiology by naming the major vessels of circulation and the category of the vascular system to which each belongs, by describing the course of blood through the heart, by identifying five major diseases of this system--all with at least 75 percent accuracy. | | | | | |

Medical Services

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| g. Students describe five respiratory ailments (causes, symptoms, and prognoses) causing the need for medical attention, with at least 75 percent accuracy. | | | | | |
| h. Students practice mouth-to-mouth resuscitation on a manikin until a complete air exchange takes place five times successively. | | | | | |
| i. Students will label a diagram of the skin and identify five conditions of concern and their care. | | | | | |
| j. Students identify major parts of the eye and ear and their functions and identify three abnormalities of structures in each part that leads to faulty function. | | | | | |
| k. Students label 10 parts of the tooth and identify the purpose of each part with at least 90 percent accuracy. | | | | | |

Diversified Occupations

Criterion: Students enrolled in diversified occupations courses will demonstrate knowledge of vocations of interest and the knowledge and skills necessary for acquiring and holding a job.

| | ADDTIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Each student rationally chooses and declares an occupational goal, and will select an occupation in which he wishes to secure employment. | | | | | |
| b. Each student submits to the instructor a job resume containing self identification material, work experience, educational information, and personal data. | | | | | |
| c. Each student submits to the instructor a planning sheet outlinining a future training program for his occupational choice. This sheet contains earnings, length of training, placement services, and location of training station. | | | | | |
| d. Each student prepares an occupational brief containing pertinent information on a chosen occupation. | | | | | |
| e. With the instructor, each student trainee plans a class schedule that will be appropriate for his occupational goal. | | | | | |

Interdisciplinary Science/Agriculture

Criterion: Students of agriculture will demonstrate scientific skills and knowledge needed by agricultural employees.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| 1. Each student fills out a sample job application form, completely and accurately. | | | | | |
| 2. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| 3. Given a case study of a terminated employee whose job was of interest to the student, each student explains that cause of the termination and how it might have been avoided. | | | | | |
| 4. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| 5. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| 6. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |

Interdisciplinary Science / Trade and Industrial Occupations

Criterion: Trades and Industrial Occupations students will demonstrate scientific skills and knowledge useful to those in vocations of the students choice.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| 1. Each student fills out a sample job application form, completely and accurately. | | | | | |
| 2. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| 3. Given a case study of a terminated employee whose job was of interest to the student, each student explains the cause of the termination and how it might have been avoided. | | | | | |
| 4. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| 5. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| 6. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |

Interdisciplinary Science / Office Occupations

Criterion: Office occupations students will demonstrate scientific skills and knowledge that is useful to secretaries.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| 1. Each student fills out a sample job application form, completely and accurately. | | | | | |
| 2. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| 3. Given a case study of a terminated employee whose job was of interest to the student, each student explains the cause of the termination and how it might have been avoided. | | | | | |
| 4. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| 5. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| 6. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |

Interdisciplinary Science / Home Economics

Criterion: Home economics students will demonstrate scientific skills and knowledge useful in their chosen career.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| 1. Each student fills out a sample job application form, completely and accurately. | | | | | |
| 2. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| 3. Given a case study of a terminated employee whose job was of interest to the student, each student explains the cause of the termination and how it might have been avoided. | | | | | |
| 4. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| 5. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| 6. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |

Interdisciplinary Science/Health Occupations

Criterion: Health occupations students will demonstrate scientific skills and knowledge useful in their chosen career.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Each student fills out a sample job application form, completely and accurately. | | | | | |
| b. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| c. Given a case study of a terminated employee whose job was of interest to the student, each student explains the cause of the termination and how it might have been avoided. | | | | | |
| d. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| e. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| f. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |
| g. Given a written test, students list three human physiological needs. | | | | | |
| h. Given a written test, students list and describe three social needs. | | | | | |
| i. Given a written test, students describe the differences between motivational needs and drives. | | | | | |
| j. Students describe the major differences and advantages of whole vs. part learning and mass vs. distributed practice. | | | | | |
| k. Students describe, compute, and suggest appropriate uses of means, medians, modes, ranges, percentages, and percentiles. | | | | | |

Interdisciplinary Science/Diversified Occupations

Criterion: Diversified occupations students will demonstrate the scientific knowledge and skills needed in their chosen careers.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Each student fills out a sample job application form, completely and accurately. | | | | | |
| b. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| c. Given a case study of a terminated employee whose job was of interest to the student, each student explains the cause of the termination and how it might have been avoided. | | | | | |
| d. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| e. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| f. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |

Interdisciplinary Science / Distributive Education

Criterion: Distributive education students will demonstrate scientific skills and knowledge useful in their chosen career.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| 1. Each student fills out a sample job application form, completely and accurately. | | | | | |
| 2. Given a role played job application interview, each student speaks clearly and answers questions fluently and completely. | | | | | |
| 3. Given a case study of a terminated employees whose job was of interest to the student, each student explains the cause of the termination and how it might have been avoided. | | | | | |
| 4. Each student describes the relationship of his chosen vocation to his drives, needs, and desires. | | | | | |
| 5. Each student writes an essay of 100 to 200 words relating social customs to his vocational choice. | | | | | |
| 6. Each student, having chosen an experiment related to his chosen vocation, designs, implements, and reports the results, using an appropriate scientific format. | | | | | |

Interdisciplinary Math/Agriculture

Criterion: Agriculture students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their prefered vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students calculate square roots. | | | | | |
| b. Students use the pythagorean theorem of right triangles to find the lengths of sides. | | | | | |
| c. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| d. Each student computes volume surface area, lateral area and lateral surface, height, and area of base of geometric solids. | | | | | |
| e. Each student finds the log of a given number from log tables, both directly and by interpolation. | | | | | |
| f. Students apply laws of logs to the simplification of numerical calculations. | | | | | |
| g. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| h. Students appropriately apply the following measuring instruments: micrometers (course and fine), vernier calipers, protractors, vernier protractors, and planimeters. | | | | | |
| i. Students use compass, dividers, straight edge, and scale for the following constructions: bisecting a line, angle, and arc; erecting a perpendiculars; drawing a line parallel to a given line; and dividing a given line into an equal number of parts. | | | | | |
| j. Students apply trigonometry to the solution of practical trade problems. | | | | | |
| k. Students perform calculations of stress and strain in practical problems. | | | | | |

Interdisciplinary Math/Agriculture

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| l. Students compute work and power output in practical industrial problems. | | | | | |
| m. Students solve problems involving gears and pullies. | | | | | |
| n. Students solve problems involving screw threads | | | | | |
| o. Students solve mark-up and mark-down problems. | | | | | |
| p. Students solve problems involving trade discounts, cash discounts, and payment dates. | | | | | |
| q. Students compute wages on a time basis including necessary deductions. | | | | | |
| r. Students calculate interest on unpaid balance and average balance. | | | | | |
| s. Students determine proceeds on non-interest and interest bearing notes. | | | | | |

Interdisciplinary Math-Trades and Industrial Occupations/ Electricity & Electronics

Criterion: Electricity & Electronic students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students calculate square roots. | | | | | |
| b. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| c. Each student finds the log of and given numbers from log tables, both directly and by interpolation. | | | | | |
| d. Students apply laws of logs to the simplifications of numerical calculations. | | | | | |
| e. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| f. Students rppropriately apply the following measuring instruments: micrometers (course and fine), vernier calipers, protractors, vernier protractors, and planimeters. | | | | | |
| g. Students use compass, dividers, straight-edge, and scale for the following constructions: bisecting a line, angle, and are; erecting perpendiculars; drawing a line parallel to a given line; and dividing a given line into an equal number of parts. | | | | | |
| h. Students compute work and power output in practical industrial problems. | | | | | |

Interdisciplinary Math/Trades and Industrial-Occupations/Graphic Arts

Criterion: Graphic Arts students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| b. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| c. Students appropriately apply the following measuring instruments: Micrometer (course and fine), vernier calipers, protractors, vernier protractors, and planimeters | | | | | |
| d. Students use compass, dividers, straight-edge, and scale for the following constructions: Bisecting a line, angle, and arc; erecting perpendiculars; drawing a line parallel to a given line; and dividing a given line into an equal number of parts. | | | | | |
| e. Students solve problems relative to camera adjustments and photographic lab processes. | | | | | |
| f. Students compute wages on a time basis including necessary deductions | | | | | |

Interdisciplinary Math - Trades and Industrial Occupations/Computer Science

Criterion: Computer Science students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students convert decimals into common fractions reduced to lowest terms and common fractions into decimals. | | | | | |
| b. Students convert values measured in one unit to equivalent values of another unit. | | | | | |
| c. Students set up proportions and calculate proportions and averages. | | | | | |
| d. Students apply laws of logs to the simplification of numerical calculations. | | | | | |
| e. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| f. Students apply trigonometry to the solution of practical trade problems. | | | | | |
| g. Students perform calculations of stress and strain in practical problems. | | | | | |

Criterion: Industrial plastic students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| b. Students apply long and short methods of finding areas of ring sections and sectors of circles and compute the results with reasonable accuracy. | | | | | |
| c. Each student computes volume, surface area, lateral area and lateral surface, height, and area of base of geometric solids. | | | | | |
| d. Each student computes the area of the surface of a sphere and the volumes of composite solid figures. | | | | | |
| e. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| f. Students appropriately apply the following measuring instruments: micrometers (course and fine), vernier calipers, protractors, vernier protractors, and planimeters. | | | | | |
| g. Students use compass, dividers, straight-edge, and scale for the following constructions: bisecting a line, angle, and arc; erecting perpendiculars; drawing a line parallel to a given line; and dividing a given line into an equal number of parts | | | | | |
| h. Students apply trigonometry to the solution of practical trade problems. | | | | | |
| i. Students perform calculations of stress and strain in practical problems. | | | | | |
| j. Students solve practical problems involving tapers. | | | | | |
| k. Students solve problems involving screw threads. | | | | | |

Interdisciplinary Math - Trades and Industrial Occupations/Communications

Criterion: Communication students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students convert decimals into common fractions reduced to lowest terms and common fractions into decimals. | | | | | |
| b. Students convert values measured in one unit to equivalent values of other units. | | | | | |
| c. Students set up proportions and calculate proportions and averages. | | | | | |
| d. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| e. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| f. Students solve problems relative to camera adjustments and photographic lab processes. | | | | | |

Interdisciplinary Math/Trades and Industrial-Occupations/Building Trades

Criterion: Building Trades students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students calculate square roots. | | | | | |
| b. Students apply the pythagorean theorem to right triangles to find the length of a side. | | | | | |
| c. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| d. Each student computes volume, surface area, lateral area, and lateral surface, height, and area of base of geometric solids. | | | | | |
| e. Each student computes the area of the surface of a sphere and the volumes of composite solid figures. | | | | | |
| f. Each student finds the log of a given number from log tables, both directly and by interpolation. | | | | | |
| g. Students apply laws of logs to the simplification of numerical calculations. | | | | | |
| h. Students appropriately apply the following measuring instruments: micrometers (course and fine), vernier calipers, protractors, vernier protractors, and planimeters. | | | | | |
| i. Students use compass, dividers, straight edge, and scale for the following constructions: bisecting a line, angle, and arc, erecting perpendiculars, drawing a line parallel to a given line; and dividing a given line into an equal number of parts. | | | | | |
| j. Students apply trigonometry to the solution of practical trade problems. | | | | | |
| k. Students perform calculations of stress and strain in practical problems. | | | | | |

Interdisciplinary Math/Trades and Industrial-Occupations/Building Trades, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| l. Students compute work and power output in practical industrial problems. | | | | | |
| m. Students solve practical problems involving tapers. | | | | | |
| n. Students solve problems involving gears and pullies. | | | | | |
| o. Students solve problems involving screw threads. | | | | | |
| p. Students compute wages on a time basis including necessary deductions. | | | | | |

Interdisciplinary Mat' 'Trades and Industrial Occupations/Drafting

Criterion: Drafting students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students calculate square roots. | | | | | |
| b. Students apply the pythogorean theorem to right triangles to find the length of a side. | | | | | |
| c. Students apply tables at constants to the comutations of areas of regular polygons. | | | | | |
| d. Students calculate actual dimensions of an object from dimenstions measured on a diagram. | | | | | |
| e. Students apply long and short methods of finding areas of ring sections and sectors of circles and compute the results. | | | | | |
| f. Each student computes volume surface area, lateral area and lateral surface, height, and area of base of geometric solids. | | | | | |
| g. Each student computes the area of the surface of a sphere and the volumes of the composite solid figures. | | | | | |
| h. Each student finds the log of a given number from log tables, both directly and by interpolation. | | | | | |
| i. Students apply laws of logs to the simplification of numerical calculations | | | | | |
| j. Students demonstrate appropriate use of at least three types of graphs used in experimental work. | | | | | |
| k. Students appropriately apply the following measuring instruments: micrometers (course and fine), vernier calipers, protractors, vernier protractors, and planimeters. | | | | | |

Interdisciplinary Math/Trades and Industrial Occupations/Drafting, continued

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| l. Students use compass, dividers, straight-edge, and scale for the following constructions: bisecting a line, angle, and arc; erecting perpendiculars; drawing a line parallel to a given line; and dividing a given line into an equal number of parts. | | | | | |
| m. Students apply trigonometry to the solution of practical trade problems. | | | | | |
| n. Students perform calculations of stress and strain in practical problems. | | | | | |
| o. Students solve practical problems involving tapers. | | | | | |
| p. Students solve problems involving gears and pullies. | | | | | |
| q. Students solve problems involving screw threads. | | | | | |
| r. Students compute wages on a time basis including necessary deductions. | | | | | |

Interdisciplinary Math/Trades and Industrial Occupations/Vocational Auto Mechanics, Welding, Machine Shop.

Criterion: Vocational Auto Mechanics, Welding, Machine Shop students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students apply the pythagorean theorem to right triangles to find the length of a side. | | | | | |
| b. Students calculate actual dimensions of an object from dimensions measured on a diagram. | | | | | |
| c. Students appropriately apply the following measuring instruments: Micrometer (course and fine), vernier calipers protractors, vernier protractors, and planimeters. | | | | | |
| d. Students use compass, dividers, straight edge, and scale for the following constructions: Bisecting a line, angle and arc; erecting perpendiculars; drawing a line parallel to a given line; and dividing a given line into an equal number of parts. | | | | | |
| e. Students perform calculations of stress and strain in practical problems. | | | | | |
| f. Students solve practical problems involving tapers. | | | | | |
| g. Students solve problems involving gears and pullies. | | | | | |
| h. Students solve problems involving screw threads. | | | | | |
| i. Students solve problems involving the milling machine, computing cutting speed and feed. | | | | | |
| j. Students compute wages on a time basis including necessary deductions. | | | | | |

Interdisciplinary Math/Trades and Industrial Occupations/Air Space Science

Criterion: Air Space Science students enrolled in interdisciplinary math will demonstrate the knowledge and skills necessary in applying mathematics to practical problems in their preferred vocational field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students use a coordinate system to represent angles in solving a set of problems. | | | | | |
| b. Students express the measure of an angle in degrees or radians and correctly explain the relationship between the two measures. | | | | | |
| c. Given the necessary information, students can correctly compute the functional value or a given angle in a right triangle. | | | | | |
| d. Each student expresses the sum, difference, multiple, and product of functions of angles in terms of the elementary function. | | | | | |
| e. Students apply laws of sines, cosines, and tangents to obtain correct numerical solutions for a series of oblique triangles. | | | | | |
| f. Students use Mollweide formulas to check answers to their own problems. | | | | | |
| g. Students correctly apply vector analysis to the solution of simple mechanics problems in air navigation. | | | | | |
| h. Students solve problems in air navigation with accepted standard of accuracy. | | | | | |

Interdisciplinary Math for D.E.

1. Criterion: Students enrolled in Distributive Education classes will demonstrate the basic mathematical skills required in the marketing area.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students demonstrate acceptable procedures in making bank deposits, verifying the deposits, maintaining personnel records, and reconciling bank balances. | | | | | |
| b. Students correctly calculate discounts using more than one method, and also calculate mark-ups and mark-downs. | | | | | |
| c. Students correctly figure simple interest rates (using the 6%-60 day technique and the more precise fractional method) and determine due dates. | | | | | |
| d. Students correctly calculate the interest on installment and credit purchases. | | | | | |
| e. Students correctly prepare a simple payroll involving different hourly rates and various deductions. | | | | | |
| f. Students make correct insurance calculations involving long and short term rate tables, premiums, and refunds. | | | | | |
| g. Students correctly measure the weight and dimensions of a given three-dimensional object, accurately calculate the volume and surface area, and express the answers in both the metric and U.S. dimensional systems. | | | | | |
| h. Students accurately compute compound interest and find an ordinary annuity. | | | | | |

2. Criterion: Students correctly apply mathematical skills in distributive education situations.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students correctly compute mark-up and mark-down, and percent of mark-down. | | | | | |
| b. Students correctly calculate trade discounts and cash discounts and payment dates. | | | | | |
| c. Students correctly compute commission on a sale, interest rates on an installment sale, prime cost, gross cost, and discount rates. | | | | | |
| d. Students correctly compute a simple payroll involving different hourly rates and various deductions. | | | | | |
| e. Students correctly compute an income tax involving all income tax from appendices. | | | | | |
| f. Students compute profit and loss from sales using both straight line and diminishing rate techniques. | | | | | |
| g. Students accurately calculate interest on unpaid balance and average balance and determine proceeds on non-interest and interest bearing notes. | | | | | |
| h. Students correctly compute commission fees, tax on sales, accrued interest, interest payment, and rate of return on a given investment. | | | | | |

Interdisciplinary English/Distributive Education

Criterion: The Distributive Education student will demonstrate effective use of language to meet the needs of sales and marketing communication.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Using a format similar to an employment application (or resume) the student will write an acceptable description of himself and his qualifications. | | | | | |
| b. In a simulated employment interview, the student, using acceptable language, will orally discuss himself and his qualifications. | | | | | |
| c. The student will demonstrate, in simulation and written examinations, his skill and knowledge in the use of sales language appropriate to and effect for given sales situations. | | | | | |
| d. The student will develop an advertising campaign which utilizes appropriate and effect language. | | | | | |
| e. In written examinations, the student will demonstrate his understanding, with 80 percent accuracy, of the effect of various levels and types of language on others, especially as related to selling and advertising. | | | | | |
| f. The student will research and write a report (4 page minimum) about some field relating to distribution or marketing (a product, an industry, economics, government, business law, etc.). | | | | | |
| g. The student will research and write a report about a given distribution job of interest to him. | | | | | |

Interdisciplinary English/Distributive Education

Criterion: The Distributive Education student will demonstrate effective use of language needed to communicate in most social environments, and to understand and appreciate the communication of others.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will explain why language understandable to one group of people may not be to another. | | | | | |
| b. The student will describe a line drawing so that other members of the class can reproduce the drawing without seeing it. | | | | | |
| c. The student will identify and describe in a two page paper the qualities and abilities which contribute to successful application for and employment in distributive occupations. | | | | | |
| d. On periodic spelling tests, the student will answer questions concerning grammar, punctuation, and usage with 80 percent accuracy | | | | | |

Interdisciplinary English/Trades and Industry

Criterion(general T & I): The Trades and Industry student will demonstrate effective use of language to meet the needs of communication in the trades and industry fields.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will plot and describe a sequence of training and course requirements for entry level positions in his chosen field so that all training is identified and its availability is confirmed through to job entry. | | | | | |
| b. The student will write a report on why he wants to enter his chosen occupational field, describing at least five specific reasons. | | | | | |
| c. Through observing individuals actually employed in the field, the student will identify and describe, in a written report, at least five major activities in his chosen occupational field. | | | | | |

Interdisciplinary English/Trades and Industry

2. Criterion (general T & I): The Trades & Industry student will demonstrate effective use of language needed to communicate in most social environments and to understand and appreciate the communication of others.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will explain why language understandable to one group of people may not be to another | | | | | |
| b. The student will identify and describe in a two page paper the qualities and abilities which contribute to successful application for and employment in the T & I occupation of his choice. | | | | | |
| c. The student will describe a line drawing so that other members of the class can reproduce the drawing without seeing it. | | | | | |
| d. On periodic tests, the student will answer questions concerning spelling, grammar, punctuation, and usage with 80 percent accuracy. | | | | | |

Interdisciplinary English/Trades and Industry - Drafting

Criterion: The drafting student will demonstrate proficiency in the use of language to meet the needs of communication in the drafting field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will describe in a brief paper the objects shown in two complete drawings: One he has done, and one supplied by the teacher. | | | | | |
| b. The student will identify and differentiate, in a brief paper the areas (architectural, electrical, mechanical, etc.) of drafting. | | | | | |
| c. The student will describe methods and needs for the care and maintenance of specific drafting tools and equipment. | | | | | |
| d. In a two to four page paper the student will describe the relationships which exist between the engineering/drafting aspect of industry and the manufacturing/production aspect. | | | | | |

Interdisciplinary English/Trades and Industry - Auto Mechanics/Small Motors

Criterion: The student will demonstrate proficiency in the use of langauage to meet the needs of communication in the auto mechanics/small motors field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will state and describe, the safety requirements to be observed in the use of specific power and hand tools and will explain reasons for each. | | | | | |
| b. The student will describe methods and needs for the care and maintenance of specific power and hand tools. | | | | | |
| c. The student will describe the operation, uses, characteristics, and applications of specific power and hand tools. | | | | | |
| d. The student will explain in a written paper, the theory and operation of the internal combustion gasoline engine. | | | | | |
| e. The student will identify and define in brief prose sentences, using non-technical language, specific auto and motor parts and their relationships to the overall function of the motor, automobile or part thereof. | | | | | |

Interdisciplinary English/Trades and Industry - Graphic Arts

Criterion: The graphic arts student will demonstrate proficiency in the use of language to meet the needs of communication in the graphic arts field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will state and describe the safety requirements to be observed in the use of specific graphic arts, and will explain reasons for each. | | | | | |
| b. The student will identify and describe the processes involved in the publication of a book. | | | | | |
| c. The student will write a short paper (3-5 pages) describing the history and development of a specific aspect of the graphic arts industry (paper production, printing techniques, printing styles, etc.). | | | | | |
| d. Given a sheet of draft copy, the student will proofread the copy and make needed corrections from which printable material could be produced. | | | | | |
| e. On periodic written tests, the student will spell correctly 85 percent of a list of words given, and will correctly answer 85 percent of items relating to punctuation, grammar, and style | | | | | |
| f. The student will describe the characteristics of high quality printed matter, and the processes which result in high quality. | | | | | |

Interdisciplinary English/Trades and Industry - Commercial Art

Criterion: The commercial art student will demonstrate proficiency in the use of language to meet the needs of communication in the commercial art fields.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will describe, in a brief paper, the basic methods of planographic, relief, and intaglio printing from the art work through to the printed page. | | | | | |
| b. The student will describe in writing the uses, characteristics, and applications of specific art materials and media. | | | | | |
| 3. The student will describe methods and needs for the care and maintenance of specific media equipment. | | | | | |

Interdisciplinary English/Trades and Industry - Plastics

Criterion: The plastics student will demonstrate proficiency in the use of language to meet the needs of communication in the plastics field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will state and describe the safety requirements to observe in the use of specific power and hand tools in plastics work, and will explain the reasons for each. | | | | | |
| b. The student will describe methods and needs for the care and maintenance of specific power and hand tools. | | | | | |
| c. The student will describe the uses, characteristics, and applications of specific plastics and plastic construction materials. | | | | | |
| d. The student will describe the operations, uses, characteristics, and applications of specific power and hand tools and equipment. | | | | | |

Interdisciplinary English/Trades and Industry/Electronics

Criterion: The electricity/electronics student will demonstrate proficiency in the use of language to meet the needs of communications in the electricity/electronics fields.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will state and describe the safety requirements to be observed while making electrical measurements on "live" circuits, and will explain the reasons for each. | | | | | |
| b. In addition to using symbol formulae, the student will state basic laws and definitions of electricity using acceptable prose with 85 percent accuracy. | | | | | |
| c. The student will describe the operation, uses, and applications of specific electronic equipment, measuring instruments, theories, laws, and formulae, as determined by the instructor to be pertinent, with 85 percent accuracy. | | | | | |
| d. The student will identify units and symbols used in electronic schematics and will read and interpret in a prose paragraph a simple schematic drawing. | | | | | |

Interdisciplinary English/Trades and Industry - Television

Criterion: The television student will demonstrate proficiency in the use of language to meet the needs of communication in the television field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will demonstrate understanding of the vocabulary used in television by correctly defining, in lay terms, at least 80 percent of the items in a vocabulary test. | | | | | |
| b. In planning and producing a five minute dramatic sketch for television, the student will demonstrate acceptable language usage and understanding of mechanics, spelling, and grammar. | | | | | |
| c. The student will write and prepare a television script suitable for production which employes good language usage and an understanding of mechanics, spelling, and grammar. | | | | | |
| d. The student will show improvement in his understanding of language skills in the preparation of several television scripts during the school year. | | | | | |

Interdisciplinary English/Trades and Industry - Computer Science

Criterion: The computer science student will demonstrate proficiency in the use of language to meet the needs of communication in the computer science field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. In a two to four page paper, the student will discuss the impact of the computer on modern science business, and industry by accurately describing at least two of the segments of each of these fields that require the use of the computer. | | | | | |
| b. The student will identify and describe eight broad occupational categories in computer technology. | | | | | |
| c. In a one page paper, the student will identify and describe the differences between analog and digital computers by correctly identifying the characteristics of each. | | | | | |
| d. The student will describe the advantages and disadvantages of selected input-output and storage devices. | | | | | |

Interdisciplinary English/Trades and Industry - Woodworking/Building Construction

Criterion: The woodwork student will demonstrate proficiency in the use of language to meet the needs of communication in the woodwork/building construction fields.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will state and describe the safety requirements to be observed in the use of specific power and hand tools in woodworking and building construction, and will explain the reasons for each. | | | | | |
| b. The student will identify units, symbols, lines, notes, scales, etc., used in blueprints and drawings, and will read and interpret in a prose paragraph a simple blueprint or drawing of an object to be built. | | | | | |
| c. The student will describe the operation, uses, characteristics, and applications of specific power and hand tools and equipment. | | | | | |
| d. The student will describe the uses, characteristics, and applications of specific woods and wood construction materials. | | | | | |
| e. The student will describe methods and needs for the care and maintenance of specific power and hand tools. | | | | | |

Interdisciplinary English/Trades and Industry - Metals

Criterion: The metals student will demonstrate proficiency in the use of language to meet the needs of communication in the metal work fields.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will state and describe the safety requirements to be observed in the use of specific power and hand tools in metal working and will explain reasons for each. | | | | | |
| b. The student will identify units, symbols, lines, notes, scales, etc., used in blueprints and drawings, and will read and interpret, in a prose paragraph, a simple blueprint or drawing of an object to be built. | | | | | |
| c. The student will describe the operation, uses, characteristics, and applications of specific power hand tools and equipment. | | | | | |
| d. The student will describe the uses, characteristics, and applications of specific metals and metal construction materials. | | | | | |
| e. The student will describe methods and needs for the care and maintenance of specific power and hand tools. | | | | | |

Interdisciplinary English/Trades and Industry - Air-Space Science

Criterion: The air-space science student will demonstrate proficiency in the use of language to meet the needs of communication in the air-space science fields.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will point out and describe at least 25 of the components of any general aircraft, and will accurately describe the functions of at least 90 percent of these. | | | | | |
| b. The student will describe 20 air space science relate occupations, 10 of which he would not consider for a career, and 10 of which he would consider for a career, and he will describe reasons for his choices. | | | | | |
| c. In debating the pros and cons of FAA rules, students will employ language which utilizes an adequate technical vocabulary and which is acceptable in terms of grammar and usage. | | | | | |

Interdisciplinary English/Air Space

Criterion: Air space science students will demonstrate the communication skills necessary for employment in some air space vocation or for use of aviation as an avocation.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students identify on their own diagrams the parts, movements, and systems of the airplane and explain orally the functions of each to each of his classmates. | | | | | |
| b. Students describe orally the relationships of the various parts of an airplane on two levels--technical and non-technical. | | | | | |
| c. Students select a work of literature related to aviation or aerospace, read it outside class, and discuss the book with the instructor. | | | | | |
| d. Students test their own skill in describing and explaining, something of interest to them on both the technical and non-technical levels. | | | | | |
| e. Students determine their own language needs through demonstration, discussion and writing. | | | | | |
| f. Students read diagrams or schematic drawings related to their chosen careers. | | | | | |
| g. Students explain diagrams or schematic drawings to other class members so that other class members are satisfied that they understand. | | | | | |

English/Office Occupations

Criterion: The Office Occupations student will demonstrate effective use of language needed to communicate in most social environments, and to understand and appreciate the communication of others.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. The student will explain why language understandable to one group of people may not be to another. | | | | | |
| b. The student will describe a line drawing so that other members of the class can reproduce the drawing without seeing it. | | | | | |
| c. The student will identify and describe in a two page paper the qualities and abilities which contribute to successful application for and employment as a secretary. | | | | | |
| d. On weekly spelling tests, the student will spell correctly at least 85 percent of the words given. | | | | | |
| e. On periodic examinations the student will answer questions concerning grammar, punctuation, and usage with 80 percent accuracy. | | | | | |

Interdisciplinary English/Office Occupations

Criterion: The Office Occupations student will demonstrate effective use of language to meet the needs of communication in secretarial employment.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg.Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Using a format similar to an employment application (or resume), the student will write a description of herself and her qualifications. | | | | | |
| b. In a simulated employment interview the student will orally discuss herself and her qualifications. | | | | | |
| c. In transcribing from machines and/or notes, the student will demonstrate ability to make needed corrections in grammar, punctuation, style, and usage to produce mailable copy. | | | | | |
| d. The student will demonstrate knowledge of good business language usage by writing a letter of acknowledgement, a letter to cancel or make an appointment, a sales letter, and a letter of transmittal; these will be typed in mailable form. | | | | | |
| e. Students will deliver orally to the class 10 minute reports on proper grooming for a secretary. | | | | | |

Supportive Interdisciplinary Programs (Mathematics/Office Occupations)

1. Criterion: Students enrolled in office occupations programs will demonstrate the basic mathematical skills required in the business field.

| | ADDITIONAL SUPPORT NEEDED | | | | |
|---|---|---|---|---|---|
| | 1 Need is Critical | 2 Lrg. Amt. Needed | 3 Some Needed | 4 None Needed | Not Applicable |
| a. Students accurately add, subtract, multiply, and divide six place integer numbers. | | | | | |
| b. Students accurately add, subtract, multiply, and divide fractions. | | | | | |
| c. Students accurately convert from fractions and mixed numbers to decimals and back. | | | | | |
| d. Students accurately express fractions in terms of percent, find a given percentage of a number, find the number which is a given percentage more or less than another number, and calculate percent increase or decrease. | | | | | |

APPENDIX B

Student Enrollment Summary

DATA TO BE GATHERED FROM SCHOOL RECORDS

1. School enrollment (ADM): Clearfield High School

| Year | Grade 10 | 11 | 12 | |
|---|---|---|---|---|
| 1967-68 | 545 | 512 | 407 | |
| 1968-69 | 578 | 529 | 491 | |
| 1969-70 | 606 | 512 | 448 | |

2. Vocational students:

| | 1967-68 M | F | 1968-69 M | F | 1969-70 M | F |
|---|---|---|---|---|---|---|
| Agriculture | 96 | - | 102 | 1 | 126 | 1 |
| Trade and Industrial | 75 | - | 77 | - | 87 | - |
| Office | 140 | 276 | 201 | 387 | 200 | 396 |
| Home Economics | - | - | - | - | - | - |
| Gainful | - | - | - | - | - | - |
| Useful | - | 297 | - | 287 | 13 | 307 |
| Health Occupations | - | - | - | - | - | - |
| Distributive | 22 | 18 | 33 | 17 | 10 | 11 |
| Industrial Arts | 324 | - | 320 | - | 351 | - |

3. Vocational students enrolled in occupationally oriented general education courses:

| | 1967-68 M | F | 1968-69 M | F | 1969-70 M | F |
|---|---|---|---|---|---|---|
| Math | 8 | - | 13 | - | - | - |
| English | - | - | - | - | - | - |
| Science | - | - | - | - | - | - |

4. Number of 12th grade students expressing a written intention to go to four year colleges:

| | 1967-68 | 1968-69 | 1969-70 |
|---|---|---|---|
| Male | 105 | 99 | - |
| Female | 137 | 108 | - |

5. Special needs students enrolled in vocational education programs (grades 10-12):

| | DE | | AG | | T & I | | Office | | Health | | Home Ec (Gainful) | | Home Ec (Useful) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1967-68 | | | | | | | | | | | | | | |
| 1968-69 | | | | | | | | | | | | | | |
| 1969-70 | | | | | | | | | | | | | | |

6. Students completing* vocational programs:

| | DE | | AG | | T & I | | Office | | Health | | Home Ec (Gainful) | | Home Ec (Useful) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| May 1968 | 19 | 13 | 87 | - | 75 | - | 140 | 276 | - | - | - | - | - | 297 |
| May 1969 | 20 | 13 | 102 | 1 | 77 | - | 201 | 387 | - | - | - | - | - | 287 |
| May 1970 | 10 | 11 | 111 | 1 | 87 | - | 200 | 396 | - | - | - | - | 13 | 307 |

Definition of "completing" a program is attached.

DATA TO BE GATHERED FROM SCHOOL RECORDS

1. School enrollment (ADM): East High School

| Year | Grade | | | |
|---|---|---|---|---|
| | 10 | 11 | 12 | Sp Ed |
| 1967-68 | 655 | 568 | 548 | 17 |
| 1968-69 | 620 | 620 | 578 | 21 |
| 1969-70 | 581 | 610 | 620 | 36 |

2. Vocational students:

| | 1967-68 | | 1968-69 | | 1969-70 | |
|---|---|---|---|---|---|---|
| | M | F | M | F | M | F |
| Agriculture | - | - | - | - | - | - |
| Trade and Industrial | 246 | 84 | 369 | 79 | 509 | 108 |
| Office | 211 | 369 | 255 | 507 | 194 | 367 |
| Home Economics | | | | | | |
| Gainful | - | - | 52 | - | 72 | - |
| Useful | 8 | 459 | 1 | 573 | - | 528 |
| Health Occupations | - | - | - | 22 | 4 | 26 |
| Distributive | 8 | 4 | 21 | 11 | 24 | 10 |
| Industrial Arts | - | - | - | - | - | - |

3. Vocational students enrolled in occupationally oriented general education courses:

| | 1967-68 | | 1968-69 | | S I T E 1969-70 | |
|---|---|---|---|---|---|---|
| | M | F | M | F | M | F |
| Math | - | - | - | - | 45 | 23 |
| English | - | - | - | - | 45 | 23 |
| Science (Social Science) | - | - | - | - | 45 | 23 |

4. Number of 12th grade students expressing a written intention to go to four year colleges:

| | 1967-68 | 1968-69 | 1969-70 |
|---|---|---|---|
| Male | 204 | 204 | 228 |
| Female | 203 | 205 | 225 |

5. Special needs students enrolled in vocational education programs (grades 10-12):

| | DE | | AG | | T & I | | Office | | Health | | Home Ec (Gainful) | | Home Ec (Useful) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1967-68 | - | - | - | - | N | O | R | E | C | O | R | D | - | - | - | - | - | - |
| 1968-69 | - | - | - | - | " | " | " | " | " | " | " | " | - | - | - | - | - | - |
| 1969-70 | - | - | - | - | 8 | 6 | 1 | 9 | - | 3 | 13 | - | - | 27 |

6. Students completing *vocational programs:

| | DE | | AG | | T & I | | Office | | Health | | Home Ec (Gainful) | | Home Ec (Useful) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| May 1968 | 8 | 4 | - | - | 226 | 84 | 200 | 388 | - | - | - | - | 7 | 444 |
| May 1969 | 20 | 11 | - | - | 316 | 76 | 248 | 493 | - | 22 | 49 | - | - | 564 |
| May 1970 | 20 | 10 | - | - | 458 | 99 | 188 | 341 | 4 | 26 | 70 | - | - | 517 |

*Definition of "completing" a program is attached.

DATA TO BE GATHERED FROM SCHOOL RECORDS

1. School enrollment (ADM): Kearns High School

| Year | Grade 10 | 11 | 12 | |
|---|---|---|---|---|
| 1976-68 | 871 | 555 | 472 | 1898 |
| 1968-69 | 856 | 745 | 474 | 2075 |
| 1969-70 | 876 | 774 | 603 | 2253 |

2. Vocational students:

| | 1967-68 M | F | 1968-69 M | F | 1969-70 M | F |
|---|---|---|---|---|---|---|
| Agriculture | - | - | 44 | 40 | 39 | 25 |
| Trade and Industrial | 207 | - | 304 | - | 397 | - |
| Office | 222 | 705 | 345 | 922 | 281 | 844 |
| Home Economics | - | .26 | - | .32 | - | .35 |
| Gainful | - | 101 | - | 150 | - | 262 |
| Useful | - | 398 | - | 507 | - | 524 |
| Health Occupations | - | - | - | - | - | - |
| Distributive | 27 | 27 | 32 | 32 | 35 | 34 |
| Industrial Arts | 597 | 16 | 711 | 16 | 774 | 29 |

3. Vocational students enrolled in occupationally oriented general education courses:

| | 1967-68 M | F | 1968-69 M | F | 1969-70 M | F |
|---|---|---|---|---|---|---|
| Math | - | - | - | - | 15 | - |
| English | - | - | - | - | - | - |
| Science | - | - | - | - | - | - |

4. Number of 12th grade students expressing a written intention to go to four year colleges:

| | 1967-68 | 1968-69 | 1969-70 |
|---|---|---|---|
| Male | 87 | 64 | 115 |
| Female | 91 | 66 | 145 |

5. Special needs students enrolled in vocational education programs (grades 10-12):

| | DE | | AG | | T & I | | Office | | Health | | Home Ec (Gainful) | | Home Ec (Useful | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1967-68 | | | | | | | | | | | | | | |
| 1968-69 | | | | | | | | | | | | | | |
| 1969-70 | | 2 | | | 14 | 3 | 1 | 3 | | | | | | 5 |

6. Students completing *vocational programs:

| | DE | | AG | | T & I | | Office | | Health | | Home Ec (Gainful) | | Home Ec (Useful) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| May 1968 | | | | | | | | | | | | | | |
| May 1969 | | | | | | | | | | | | | | |
| May 1970 | 18 | 20 | | | 95 | - | 6 | 137 | - | - | - | 16 | | 25 |

*Definition of "completing" a program is attached.

APPENDIX C

Percentages of High School Students
In
Project SUCCESS Courses

Percentages of Clearfield High School Students
in
Project SUCCESS Courses

| | 1967-68 | | | 1968-69 | | | 1969-70 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Vocational students: | | | | | | | | | |
| Agriculture | 7 | | 7 | 6 | | 6 | 8 | | 8 |
| Trade and Industrial | 5 | | 5 | 4 | | 4 | 6 | | 6 |
| Office | 10 | 19 | 28 | 13 | 24 | 37 | 13 | 25 | 38 |
| Home Ec. Gainful | | | | | | | | | |
| Home Ec. Useful | .2 | 20 | 20 | | 18 | 18 | | 20 | 20 |
| Health Occupations | | | | | | | | | |
| Distributive | 2 | 1 | 3 | 2 | 1 | 3 | .6 | .7 | 1 |
| Industrial Arts | 22 | | 22 | 20 | | 20 | 22 | | 22 |
| Total | 44 | 20 | 64 | 46 | 25 | 71 | 49 | 26 | 75 |
| Vocational students enrolled in occupationally oriented general education courses: | | | | | | | | | |
| Math | .1 | | .1 | .8 | | .8 | | | |
| English | | | | | | | | | |
| Science | | | | | | | | | |
| Number of 12th grade students expressing a written intention to go to four year colleges: | 7 | 9 | 17 | 6 | 7 | 13 | | | |

CLEARFIELD

| | 1967-68 | | | 1968-69 | | | 1969-70 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Special needs students enrolled in Vocational education programs (grades 10-12): | | | | | | | | | |
| Distributive Education | | | | | | | | | |
| Agriculture | | | | | | | | | |
| Trade and Industrial | | | | | | | | | |
| Office | | | | | | | | | |
| Health Occupations | | | | | | | | | |
| Home Ec. Gainful | | | | | | | | | |
| Home Ec. Useful | | | | | | | | | |

| | May 1968 | | | May 1969 | | | May 1970 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Students completing vocational programs: | | | | | | | | | |
| Distributive Education | 1 | .8 | 2 | 1 | .8 | 2 | .6 | .7 | 1 |
| Agriculture | 6 | | 6 | 6 | .1 | 6 | 7 | | 7 |
| Trade and Industrial | 5 | | 5 | 5 | | 5 | 6 | | 6 |
| Office | 10 | 19 | 28 | 13 | 24 | 37 | 13 | 25 | 38 |
| Health Occupations | | | | | | | | | |
| Home Ec. Gainful | | | | | | | | | |
| Home Ec. Useful | | | | | | | | | |

Percentages of Kearns High School Students
in
Project SUCCESS Courses

| | 1967-68 | | | 1968-69 | | | 1969-70 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Vocational Students: | | | | | | | | | |
| Agriculture | | | | 2 | 2 | 4 | 2 | 1 | 3 |
| Trade and Industrial | 11 | | 11 | 15 | | 15 | 18 | | 18 |
| Office | 12 | 37 | 49 | 17 | 44 | 61 | 12 | 37 | 50 |
| Home Ec. Gainful | | 5 | 5 | | 7 | 7 | | 12 | 12 |
| Home Ec. Useful | | 21 | 21 | | 24 | 24 | | 23 | 23 |
| Health Occupations | | | | | | | | | |
| Distributive | 1 | 1 | 3 | 2 | 2 | 3 | 2 | 2 | 3 |
| Industrial Arts | 31 | .8 | 32 | 34 | .7 | 35 | 34 | 1 | 36 |
| Total | 55 | 47 | 103 | 69 | 56 | 125 | 67 | 53 | 120 |
| Vocational students enrolled in occupationally oriented general education courses: | | | | | | | | | |
| Math | | | | | | | .6 | | .6 |
| English | | | | | | | | | |
| Science | | | | | | | | | |
| Number of 12th grade students expressing a written intention to go to four year colleges: | 5 | 5 | 9 | 3 | 3 | 6 | 5 | 6 | 12 |

KEARNS

| | 1967-68 | | | 1968-69 | | | 1969-70 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Special needs students enrolled in Vocational education programs (grades 10-12): | | | | | | | | | |
| Distributive Education | | | | | | | | .1 | .1 |
| Agriculture | | | | | | | | | |
| Trade and Industrial | | | | | | | .6 | .1 | .7 |
| Office | | | | | | | .04 | .1 | .2 |
| Health Occupations | | | | | | | | | |
| Home Ec. Gainful | | | | | | | | | |
| Home Ec. Useful | | | | | | | | | |

| | May 1968 | | | May 1969 | | | May 1970 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Students completing vocational programs: | | | | | | | | | |
| Distributive Education | | | | | | | .8 | .9 | 2 |
| Agriculture | | | | | | | | | |
| Trade and Industrial | | | | | | | 4 | | 4 |
| Office | | | | | | | .3 | 6 | 6 |
| Health Occupations | | | | | | | | | |
| Home Ec. Gainful | | | | | | | | .7 | .7 |

Percentages of East High School Students
in
Project SUCCESS Courses

| | 1967-68 | | | 1968-69 | | | 1969-70 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Vocational students: | | | | | | | | | |
| Agriculture | | | | | | | | | |
| Trade and Industrial | 14 | 5 | 18 | 20 | 4 | 25 | 28 | 6 | 34 |
| Office | 12 | 21 | 33 | 14 | 28 | 42 | 11 | 20 | 31 |
| Home Ec. Gainful | | | | 3 | | 3 | 4 | | 4 |
| Home Ec. Useful | .4 | 26 | 26 | | 31 | 31 | | 29 | 29 |
| Health Occupations | | | | | 1 | 1 | .2 | 1 | 2 |
| Distributive | .5 | .2 | .7 | 1 | .6 | 2 | 1 | .5 | 2 |
| Industrial Arts | | | | | | | | | |
| Total | 26 | 26 | 52 | 38 | 34 | 72 | 43 | 28 | 72 |
| Vocational students enrolled in occupationally oriented general education courses: | | | | | | | | | |
| Math | | | | | | | 2 | 3 | 4 |
| English | | | | | | | 2 | 3 | 4 |
| Science | | | | | | | 2 | 3 | 4 |
| Number of 12th grade students expressing a written intention to go to four year colleges: | 12 | 11 | 23 | 11 | 11 | 22 | 13 | 12 | 25 |

EAST

| | 1967-68 | | | 1968-69 | | | 1969-70 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Special needs students enrolled in Vocational education programs (grades 10-12). | | | | | | | | | |
| Distributive Education | | | | | | | | | |
| Agriculture | | | | | | | | | |
| Trade and Industrial | | | | | | | .4 | .3 | .8 |
| Office | | | | | | | .1 | .4 | .6 |
| Health Occupations | | | | | | | | .2 | .2 |
| Home Ec. Gainful | | | | | | | .4 | | .4 |
| Home Ec. Useful | | | | | | | | | |

| | May 1968 | | | May 1969 | | | May 1970 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Students completing vocational programs: | | | | | | | | | |
| Distributive Education | .5 | .1 | .7 | 1 | .6 | 2 | 1 | .5 | 2 |
| Agriculture | | | | | | | | | |
| Trade and Industrial | 13 | 5 | 20 | 17 | 4 | 22 | 25 | 5 | 31 |
| Office | 11 | 22 | 33 | 14 | 27 | 41 | 10 | 19 | 29 |
| Health Occupations | | | | | 1 | 1 | .2 | 1 | 2 |
| Home Ec. Gainful | | | | 3 | | 3 | 4 | | 4 |